SF 235
.P5
Copy 1

A Handbook
of
Dairy Statistics

By T. R. PIRTLE, Dairy Division

UNITED STATES
DEPARTMENT OF AGRICULTURE

Contribution from the Bureau of Animal Industry
JOHN R. MOHLER, Chief

Washington, D. C. June, 1922

GOVERNMENT PRINTING OFFICE : 1922

SHOUT
SHARE
IT

A Handbook of Dairy Statistics

By T. R. PIRTLE, Dairy Division

UNITED STATES
DEPARTMENT OF AGRICULTURE

Contribution from the Bureau of Animal Industry
JOHN R. MOHLER, Chief

Washington, D. C. June, 1922

GOVERNMENT PRINTING OFFICE : 1922

A HANDBOOK OF DAIRY STATISTICS.

By T. R. Pirtle.

SF235
.P5

EXPLANATORY NOTE.

Original sources and final figures are used in the tables where practicable. Preliminary figures, i. e., figures not finally verified, have been presented in a few instances to bring them up to date; but such figures are always so indicated in the tables. Many countries have found it necessary to revise the statistics gathered during the war, especially those relating to the number of cattle. During the war preliminary figures were not always indicated, but later checking up has shown them to be approximately correct, although the final figures vary from them to some extent.

(YB.) used in connection with a table indicates that the table may be continued to cover the latest figures available by reference to the Yearbook of the United States Department of Agriculture, as well as to the original source.

"Special imports" are imports brought into a country for consumption. "General imports" are for all purposes, and a part may be reexported. "Domestic exports" are of goods produced within a country.

Units of weight used to convert foreign or metric weights to pounds, United States, are:

	Pounds.
1 kilogram	2.2046
1 quintal	220.46
1 poud (Russian)	36.1128
1 hundredweight (English)	112.
1 pound (Spanish pound for Cuba)	1.0161

The terms "dairy cows" and "cows" do not mean the same, the latter term including cows not used for dairy purposes. The number of "cows" was used when the number of "dairy cows" was not obtainable.

Where blank spaces are left in tables records were not made or were not available.

When figures are given for any year it may be assumed that it is the calendar year unless otherwise stated, although

LIBRARY OF CONGRESS
RECEIVED
AUG 15 1922
DOCUMENTS DIVISION

mailed Oct 23, 1922

some of the authorities are indefinite on this point. Where the fiscal year is used, the date of ending is often changed in the middle of the series of years given.

The sources of the data quoted from United States Government publications are as follows: Department of Agriculture—Bureau of Animal Industry, Bureau of Statistics,[1] Bureau of Crop Estimates,[2] and Bureau of Markets;[2] Department of Commerce—Census Bureau and Commerce and Navigation Reports; Treasury Department—Bureau of Internal Revenue.

Reconstruction of territory recognized in all countries, 1919 and later.

---

[1] Bureau of Statistics is a former designation for the Bureau of Crop Estimates.

[2] The Bureau of Markets and the Bureau of Crop Estimates were consolidated July 1, 1921, and are now known as the "Bureau of Markets and Crop Estimates."

THE STATISTICS of an industry show its trend and form a basis for action toward its best development. Because data regarding dairy products and the trade in dairy products have never been brought together for convenient reference, attention has not been given to the trend of dairying in the degree that its importance warrants. To remedy this condition this volume has been prepared. In it will be found the available statistics on dairy production and trade which may be of value to the dairy industry.

GENERAL STATISTICS.

TABLE 1.—POPULATION of various countries.

[Statesman's Year Book.]

Country.	Year.	Population.
Argentina	[1] 1915	8,288,779
Do	[2] 1919	8,279,159
Australia	[1] 1918	4,981,000
Do	1919	6,067,430
Austria-Hungary	[4] 1910	49,211,727
Do	1919	16,067,430
Belgium	[1] 1911	7,490,411
Do	1919	7,555,576
Canada	[3] 1915	8,134,000
Denmark	[4] 1918	3,005,300
Do	1919	2,940,979
France	[4] 1913	39,674,000
Do	1919	41,475,523
Germany	[4] 1910	64,925,993
Do	1919	55,086,000
India, British	[4] 1911	315,083,000
Italy	[1] 1916	36,716,522
Do	1919	36,740,000
Japan	[1] 1916	55,965,292
Do	1919	57,070,000
Netherlands	[3] 1916	6,583,227
Do	1919	6,778,699
New Zealand	[1] 1918	1,150,000
Norway	[1] 1916	2,541,003
Do	1919	2,632,010
Poland	[1] 1911	12,467,300
Do	1919	30,072,181
Russia:		
Empire	[1] 1911	167,003,400
European	1919	131,700,800
Siberia	[1] 1911	8,719,200
South Africa (British)	[1] 1918	7,000,000
Spain	[1] 1918	20,095,272
Do	1919	20,719,598
Sweden	[4] 1911	5,522,403
Do	1919	5,813,850
Switzerland	[3] 1915	3,880,500
Do	1919	3,937,000
United Kingdom	[1] 1914	46,089,249
Do	1919	46,000,000
United States	[3] 1915	98,635,073
Do	[4] 1920	105,710,620
Uruguay	[1] 1918	1,409,000

[1] Estimate.
[2] Source or method of estimate not stated for 1919.
[3] Prorated.
[4] Census.

TABLE 2.—Average YIELD of MILK per year of milk cows in various countries.

[Various sources.]

Country.	Year.	Average yield of milk.	Country.	Year.	Average yield of milk.
		Pounds.			*Pounds.*
Netherlands	1902	7,585	Norway	1910	3,680
Switzerland	1914	6,950	Sweden	1911	3,600
United Kingdom	1914	5,934	Japan	1918	3,339
Denmark	1914	5,666	Hungary	1914	2,932
Germany	1912	4,350	Australia	1916	2,719
Canada	1911	3,779	Italy	1914	2,279
United States	1917	3,716	Chile	1916	1,520
Do	1920	3,627	Siberia	1916	1,192

TABLE 3.—Average per capita CONSUMPTION of WHOLE MILK in various countries per year.

[Numerous authorities.]

Country.	Year.	Milk consumed.	Country.	Year.	Milk consumed.
		Gallons.			*Gallons.*
Sweden	1914	69.7	Netherlands	1902	39.5
Denmark	1914	68.5	Canada	1916	26.0
Switzerland	1914	67.4	Hungary	1914	24.3
Germany	1913	61.0	United Kingdom	1914	22.2
Belgium	1895	44.0	Italy	1913	4.2
United States	1917	42.4	Hawaii	1916	1.0
Do	1920	43.0			

TABLE 4.—Average per capita CONSUMPTION of BUTTER in various countries per year.

[Numerous authorities.]

Country.	Year.	Butter consumed.	Country.	Year.	Butter consumed.
		Pounds.			*Pounds.*
Canada	1911	27.7	Netherlands	1917	16.8
Australia	1913	25.6	Sweden	1917	16.5
New Zealand	1914	21.7	Germany	1913	14.7
Denmark	1914	19.0	Norway	1906	14.0
United States	1909	17.5	Switzerland	1914	12.1
Do	1919	15.5	Italy	1913	2.5
United Kingdom	1914	17.0	Argentina [1]	1913	1.8

[1] Factory butter only.

TABLE 5.—**Average per capita CONSUMPTION of CHEESE in various countries per year.**

[Numerous authorities.]

Country.	Year.	Cheese consumed.	Country.	Year.	Cheese consumed.
		Pounds.			*Pounds.*
Switzerland	1914	26.4	Italy	1913	4.8
Netherlands	1912	13.3	Australia	1913	4.8
Denmark	1914	12.3	United States [1]	1919	[2] 4.2
United Kingdom	1905	11.2	Do.[1]	1909	3.8
Germany	1912	9.5	Canada	1911	3.0
France	1892	8.1	New Zealand	1914	3.0
Norway	1910	7.1	Argentina [3]	1913	2.9

[1] Census. [2] Including cottage cheese. [3] Factory cheese only.

TABLE 6.—**Trend of COW-TESTING ASSOCIATIONS.**

[Cooperative Danish agricultural societies and Canada News Letter, No. 15, 1920.]

Country.	Year begun.	Early records.			
		Year reported.	Number of associations.	Members.	Cows.
Denmark	1895	1916	676	15,865	239,790
Germany	1897	1914	792	13,209	351,857
Sweden	1898	1911	682	9,950	203,716
Norway	1898	1914	138	.....	36,882
Finland	1900	1916	242	4,369	82,276
Holland	1900	1910	.....	.....	77,000
Scotland	1903	1914	36	641	26,424
Canada	1904	1914	.....	2,109	19,156
Austria	1904	1911	244	.....	16,000
England	1905	1915	20	398	9,800
United States	1906	1917	459	11,720	211,986

Country.	Year begun.	Later records.			
		Year reported.	Number of associations.	Members.	Cows.
Denmark	1895	1919	636	15,000	208,900
Germany	1897	1919	333	4,560	135,540
Sweden	1898	1919	427	5,503	102,812
Norway	1898	1919	102	2,080	23,286
Finland	1900	1919	142	2,463	41,927
Scotland	1903	1918	22	426	17,827
Canada	1904	1920	.....	3,847	33,382
England	1905	1919	44	.....	32,000
United States	1906	1919	385	10,000	167,313
Do	.....	1920	468	11,918	203,472

TABLE 7.—PRODUCTION and EXPORTATION of BUTTER for various countries.

[Numerous authorities.]

Country.	Year.	Production.	Exports.
		Pounds.	*Pounds.*
United States	1909	1,621,000,000	5,981,000
Do	1919	1,648,505,382	34,556,485
Germany	1913	881,840,000	602,000
Russia (including Siberia)	1913	326,253,000	172,003,000
France	1914	286,598,000	44,619,000
Denmark	1914	257,484,000	210,084,000
Australia	1916	182,469,000	16,722,000
Canada	1911	201,808,000	3,142,000
United Kingdom	1908	[1] 177,000,000	1,125,000
Netherlands	1912	147,835,000	86,307,000
Italy	1914	[2] 110,000,000	9,310,000
New Zealand	1916	63,273,000	40,167,000
Sweden	1916	[2] 62,135,000	28,704,000
Switzerland	1916	37,000,000	2,646
Argentina	1914	20,518,000	7,676,000
Union of South Africa	1916	15,980,000	[3]

[1] Factory butter only, for Ireland. [2] Factory butter only. [3] None.

TABLE 8.—Approximate amount of MILK SOLIDS in dairy products.

[Various authorities.]

Product.	Milk solids (including fat).
	Per cent.
Milk:	
Whole milk	13.0
Skim milk	9.2
Condensed, sweetened (legal)[1]	28.0
Condensed and evaporated, not sweetened (legal)	25.5
Condensed and evaporated skim milk, sweetened (legal)	28.0
Powder—	
Whole milk (legal)	[2] 95.0
Skim milk (legal)	95.0
Cream	95.0
Malted (7½ per cent fat)	25.0
Buttermilk	95.0
Sugar	72.7
Chocolate	12.0
Whey	7.0
Buttermilk	8.4
Cream:	
20 per cent fat	26.7
40 per cent fat	43.5
Butter, 82 per cent fat	83.0
Cheese:	
Cheddar (milk with 4 per cent fat)	63.0
Cottage	62.6
Ice cream:	
10 per cent fat	20.0
14 per cent fat	20.0

[1] U. S. Dept. of Agriculture, B. A. I. Cir. 36.

[2] The moisture of whole and skimmed-milk powder commercially is about 2 per cent.

TABLE 9.—STANDARDS of BUTTERFAT and limit of MOISTURE in BUTTER in various countries.

[Various sources.]

Country.	Butterfat (min.).	Moisture (max.).
	Per cent.	*Per cent.*
Great Britain	.....	16.0
Australia	82.0	16.0
Victoria	80.0	15.0
West Australia	82.0	15.0
Argentina	82.0	16.0
Sweden	.....	16.0
Italy	82.0	.....
Russia	.....	16.0
Germany:		
Salted	80.0	16.0
Unsalted	82.0	18.0
Finland	.....	16.0
Switzerland (six cantons)	82.0	15.0
Denmark	.....	16.0
United States	82.5	[1]

[1] Below 16.

TABLE 10.—WEIGHT of MILK and CREAM, with varying per cent of fat content at 68° F.

[Department of Agriculture Bulletin 98.]

Product.	Fat content.	Weight per gallon.
	Per cent by weight.	*Pounds.*
Skim milk	0.02	8.63
Whole milk	3.00	8.60
Do	3.5	8.59
Do	4.0	8.58
Do	5.0	8.58
Do	6.0	8.57
Modified milk	10.0	8.53
Cream	12.0	8.50
Do	15.0	8.47
Do	20.0	8.43
Do	25.0	8.39
Do	35.0	8.31
Do	40.0	8.28

Milk is generally figured at 8.6 pounds and cream (18 to 20 per cent fat) at 8.4 pounds per gallon.

TABLE 11.—PROPORTION of YEARLY BUTTERFAT RECEIPTS, received monthly by creameries in Iowa, Minnesota, and Wisconsin, for the years 1913 to 1916.

[Dairy Division, Bureau of Animal Industry.]

Month.	Butterfat.	Month.	Butterfat.
	Per cent.		*Per cent.*
January	6.53	August	9.81
February	6.46	September	8.65
March	7.11	October	7.53
April	7.45	November	6.07
May	10.71	December	6.09
June	12.33		
July	11.26	Total	100.00

TABLE 12.—NORMAL FOOD for the United Kingdom.

[Royal Society Food Comm., Mar. 30, 1917.]

Food.	Food energy.
	Per cent.
Cereals (Wheat 30 per cent.)	34
Meat (including poultry and game)	18
Dairy products	15
Sugar	13
Potatoes	8
Fruits, fish, etc	12
Total	100

TABLE 13.—QUANTITY of MILK used at United States Dairy Experiment Farm, Beltsville, Md., to raise a calf.

Feed.	Quantity of feed consumed.		
	During first 6 months.[1]	During first year.[1]	During two years.[2]
	Pounds.	*Pounds.*	*Pounds.*
Milk	125.3	125.3	125.3
Skim milk	2,486.1	2,486.1	2,486.1
Grain	317.7	883.3	2,107.3
Hay, alfalfa	112.1	566.1	1,599.1
Silage, corn	728.5	3,647.5	11,164.6

[1] Average of 12 calves.

[2] Average of 11 calves; 4 of the calves were purebred or grade Holsteins and 7 were purebred or grade Guernseys. Average live weight at two years, 861 pounds.

UNITED STATES STATISTICS.

TABLE 14.—Number and percentages of CATTLE of various BREEDS in the United States, 1920.

[Bureau of Markets and Crop Estimates.]

Cattle.	Total in United States.		North Atlantic States.	North Central, East.	North Central, West.	South Atlantic.	South Central.	Far West.
	Number.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*
Aberdeen Angus	2,479,000	3.6	0.3	3.6	6.9	2.9	3.1	0.8
Ayrshire	412,000	.6	4.8	.4	.3	.3	.....	.2
Brown Swiss	170,000	.3	.4	.7	.2	.1	.....	.1
Devon	175,000	.3	.4	.1	.1	.7	.3	.4
Dutch Belted	157,000	.2	.4	.1	.1	.1	.7	.....
Galloway	534,000	.8	.1	.7	1.8	.2	.3	.3
Guernsey	1,993,000	2.9	8.8	6.3	1.9	3.6	.4	1.3
Hereford	14,302,000	21.0	1.7	7.8	24.2	9.1	22.5	40.9
Holstein	11,069,000	16.2	54.0	29.3	8.7	9.0	5.2	14.9
Jersey	9,554,000	14.0	14.3	15.3	4.8	29.5	23.8	8.8
Polled Durham	1,033,000	1.5	.1	1.8	1.9	.4	2.4	.9
Red Polled	1,772,000	2.6	.2	1.7	3.3	1.6	5.4	.5
Shorthorn	15,429,000	22.6	5.4	23.3	36.2	9.5	15.9	21.9
Other breeds	2,107,000	3.1	2.2	2.1	2.3	6.8	4.9	1.8
Nondescript	7,044,000	10.3	6.9	6.8	7.3	26.2	15.0	7.2
Total	68,230,000	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The information was brought out by an inquiry sent to 14,000 special livestock reporters of the bureau. Grades and scrubs were included in the breed in which the type predominated.

TABLE 15.—Number and value of CATTLE EXPORTED from the United States.

[Commerce and Navigation Reports; (YB.).]

Year ended June 30.	Cattle.		Year ended June 30.	Cattle.	
	Number.	Value.		Number.	Value.
1900	397,286	$30,635,153	1911	150,100	$13,163,920
1901	459,218	37,566,980	1912	105,506	8,870,075
1902	392,884	29,902,212	1913	24,714	1,177,199
1903	402,178	29,848,936	1914	18,376	647,288
1904	593,409	42,256,291	1915	5,484	702,847
1905	567,806	40,598,048	1916	21,287	2,378,248
1906	584,239	42,081,170	1917	13,387	949,503
1907	423,051	34,577,392	1918	18,213	1,247,800
1908	349,210	29,339,134	1919	42,345	2,092,816
1909	207,542	18,046,976	1920	83,039	11,921,518
1910	139,430	12,200,154	1921	145,623	10,950,507

TABLE 16.—Number of DAIRY COWS and OTHER CATTLE on farms in the United States from 1840 to 1922.

[Census Bureau and Bureau of Markets and Crop Estimates.]

Year.	Milk cows on farms.[1]	Other cattle.	Year.	Milk cows on farms.[1]	Other cattle.
1840 [2]	4,837,043	10,171,586	1911 [3]	20,823,000	39,679,000
1850 [2]	6,385,094	11,393,813	1912 [3]	20,699,000	37,260,000
1860 [2]	8,585,735	17,034,284	1913 [3]	20,497,000	36,030,000
			1914 [3]	20,737,000	35,855,000
1870 [2]	8,935,332	13,566,005	1915 [3]	21,262,000	37,067,000
1880 [2]	12,443,120	22,488,550			
1890 [2]	16,511,950	33,734,128	1916 [3]	22,108,000	39,812,000
1900 [2]	17,135,633	50,083,777	1917 [3]	22,894,000	41,689,000
1910 [2]	20,125,432	41,178,434	1918 [3]	23,310,000	44,112,000
			1919 [3]	23,455,000	45,085,000
1920 [2]	[5] 19,671,777	47,139,059	1920 [3]	23,722,000	43,398,000
			1921 [3]	[4] 23,594,000	41,993,000
			1922 [4]	24,028,000	41,324,000

[1] The number of cows within towns and villages amounts to 2,000,000.
[2] Census. The census report figures are for June 1, except for 1910, which is for April 15; and 1920, which was for January 1.
[3] Estimates, January 1.
[4] Preliminary.
[5] Dairy breeds only.

TABLE 17.—Kind and number of PUREBRED CATTLE imported into the United States from 1885 to 1920, inclusive.

[Bureau of Animal Industry.]

Breed.	Number.	Breed.	Number.
Angeler	14	Hereford	799
Angus	750	Highland	19
Ayrshire	1,762	Holstein	1,864
Zebu (buffalo)	44	Jersey	6,304
Danish	1	Kerry and Dexter	243
Devon	51	Red and Polled	520
Dutch Belted	69	Simmenthal	24
Shorthorn	2,491	Sussex	35
French	62	Brown Swiss	83
Galloway	504		
Guernsey	10,114	Total	25,753

The figures for 1919 and 1920 include only those brought from overseas, as data on purebreds from Canada are not available. Records of importations from Canada were incomplete for a large portion of this period.

TABLE 18.—**Total number of CATTLE and number of PUREBRED cattle of dairy breeds on farms in 1920.**

[Bureau of the Census.]

State.	Total cattle.	Total purebred cattle.	Total purebred dairy cattle.	Purebred dairy cattle by breeds.				
				Ayrshire.	Guernsey.	Holstein-Friesian.	Jersey.	Other dairy breeds.
Alabama	1,044,008	10,633	6,108	.....	46	1,142	4,608	312
Arizona	821,918	8,455	3,108	109	48	1,778	669	504
Arkansas	1,072,966	13,486	6,950	.....	19	2,001	4,627	303
California	2,008,037	32,388	19,144	595	1,145	12,189	3,832	1,383
Colorado	1,756,616	33,610	6,448	114	241	4,057	1,605	431
Connecticut	173,764	10,961	10,284	1,250	1,566	4,859	2,257	352
Delaware	46,509	1,707	1,663	.....	246	1,245	172	.....
Florida	638,981	4,338	2,930	46	68	337	2,380	99
Georgia	1,157,432	13,124	8,727	14	305	1,700	6,224	484
Idaho	714,903	19,376	4,138	46	197	2,049	1,579	267
Illinois	2,803,389	109,996	36,412	202	1,369	25,124	7,317	2,400
Indiana	1,546,095	50,624	21,115	509	1,215	8,477	9,921	993
Iowa	4,567,708	171,645	20,286	271	1,716	10,916	3,629	3,754
Kansas	2,975,390	97,723	17,058	694	477	10,408	4,784	695
Kentucky	1,093,453	19,693	8,829	20	40	2,046	6,421	302
Louisiana	804,241	6,498	3,415	.....	94	1,009	2,201	111
Maine	300,747	18,202	15,683	1,134	1,836	7,206	4,999	508
Maryland	283,377	9,588	8,668	113	1,867	4,073	2,323	292
Massachusetts	216,099	19,993	18,807	1,880	3,348	10,006	2,904	669
Michigan	1,537,214	62,800	46,533	291	3,369	32,702	8,296	1,875

Minnesota	3,021,469	88,696	32,668	399	4,468	22,830	2,508	2,463
Mississippi	1,250,479	16,001	8,367	.....	101	1,331	6,571	364
Missouri	2,781,644	102,939	19,037	110	760	5,569	10,708	1,890
Montana	1,268,516	22,994	3,451	13	176	2,453	560	249
Nebraska	3,167,279	82,047	7,873	74	348	5,368	1,275	808
Nevada	356,390	4,174	405	21	10	197	133	44
New Hampshire	163,653	12,656	10,750	1,214	1,151	6,695	1,348	342
New Jersey	179,459	11,631	11,538	265	1,747	7,810	1,368	348
New Mexico	1,300,335	18,727	1,327	.....	42	438	507	340
New York	2,144,244	155,185	153,037	9,521	9,749	114,662	13,411	5,694
North Carolina	644,779	10,782	7,697	44	789	1,613	4,978	273
North Dakota	1,334,552	33,821	4,797	226	346	2,937	481	807
Ohio	1,926,823	96,384	70,882	1,021	4,960	38,327	23,842	2,732
Oklahoma	2,087,049	48,252	9,539	.....	91	3,741	5,104	603
Oregon	851,108	24,712	12,852	323	697	3,624	7,771	437
Pennsylvania	1,540,816	81,290	75,189	3,097	9,618	48,652	11,036	2,786
Rhode Island	30,519	1,719	1,651	494	217	542	351	47
South Carolina	435,462	6,864	5,184	.....	644	1,008	3,389	143
South Dakota	2,374,763	62,348	5,248	85	135	4,027	312	689
Tennessee	1,161,846	24,666	11,347	.....	111	1,383	9,424	429
Texas	6,249,443	113,107	23,364	19	59	2,973	18,718	1,595
Utah	505,578	13,856	2,922	.....	93	970	1,706	153
Vermont	435,480	29,758	28,549	3,808	2,193	13,413	8,446	689
Virginia	914,674	17,777	9,586	25	1,696	4,160	3,223	482
Washington	572,644	18,560	12,720	404	941	7,673	3,402	300
West Virginia	587,462	12,485	4,450	272	333	1,134	2,546	165
Wisconsin	3,050,829	137,527	114,917	1,712	18,727	80,845	7,791	5,842
Wyoming	873,729	17,530	1,071	21	31	747	167	105
Total	66,810,836	1,981,514	916,724	30,456	79,445	528,446	231,824	46,553

TABLE 19.—Number and value of CATTLE IMPORTED into the United States for all purposes.

[Commerce and Navigation Reports; (YB.).]

Year ended June 30.	Cattle.		Year ended June 30.	Cattle.	
	Number.	Value.		Number.	Value.
1900	181,006	$2,257,694	1911	182,923	$2,953,077
1901	146,022	1,931,433	1912	318,372	4,805,574
1902	96,027	1,608,722	1913	421,649	6,640,668
1903	66,175	1,161,548	1914	868,368	18,696,718
1904	16,056	310,737	1915	538,167	17,513,175
1905	27,855	458,572	1916	439,185	15,187,593
1906	29,019	548,430	1917	374,826	13,021,259
1907	32,402	565,122	1918	293,719	17,852,176
1908	92,356	1,507,310	1919	440,399	36,995,921
1909	139,184	1,999,422	1920	575,328	45,081,179
1910	195,938	2,999,824	1921	329,974	23,634,361

TABLE 20.—Number of cows in the United States which have produced 600 or more pounds of butterfat in a year prior to 1920, in the principal dairy breeds.

[Herdbooks of cattle clubs.]

Butterfat produced.	Holstein-Friesian.	Jersey.	Guernsey.	Ayrshire.[1]
Pounds.				
1,000 or more	27	2	2	0
900 to 1,000	52	15	8	2
800 to 900	126	53	27	12
700 to 800	236	148	98	25
600 to 700	590	489	297	77

[1] Complete to Apr. 15, 1921.

The table shows the number of cows, at their highest yield, with the butterfat produced for the year. That is, 52 Holstein, 15 Jersey, 8 Guernsey, and 2 Ayrshire cows of record have produced 900 to 1,000 pounds of butterfat per cow in a year.

TABLE 21.—Number of cattle registered by the Ayrshire Breeders' Association from 1910 to Dec. 31, 1921.

[Secretary of the Ayrshire Breeders' Association.]

Year.	Bulls and cows.	Year.	Bulls and cows.
1910	3,233	1916	4,033
1911	4,798	1917	4,944
1912	2,884	1918	8,494
1913	3,950	1919	6,148
1914	4,912	1920	6,809
1915	4,439	1921	5,874

TABLE 22.—Number of cattle registered by the American Guernsey Cattle Club, Jan. 1, 1900, to Dec. 31, 1921.

[Secretary of the American Guernsey Cattle Club.]

Year.	Bulls.	Cows.	Total.	Year.	Bulls.	Cows.	Total.
1900.....	608	896	1,504	1911.....	2,402	4,001	6,403
1901.....	647	1,172	1,819	1912.....	2,942	4,578	7,520
1902.....	726	1,267	1,993	1913.....	3,653	5,642	9,295
1903.....	746	1,289	2,035	1914.....	4,348	6,937	11,285
1904.....	737	1,261	1,998	1915.....	4,765	6,535	11,300
1905.....	847	1,612	2,459	1916.....	5,030	7,654	12,684
1906.....	950	1,964	2,914	1917.....	6,167	9,366	15,533
1907.....	1,118	1,966	3,084	1918.....	6,108	9,356	15,464
1908.....	1,291	2,191	3,482	1919.....	7,648	11,781	19,429
1909.....	1,841	3,836	5,677	1920.....	7,427	11,956	19,383
1910.....	2,420	4,194	6,614	1921.....	8,036	13,971	22,007

The total number of animals in the herdbook of the American Guernsey Cattle Club to Jan. 1, 1921, is: Bulls, 68,804; cows, 112,003; total, 180,807.

TABLE 23.—Number of cattle registered by the Holstein-Friesian Association of America for the years 1900 to 1921, inclusive.

[Secretary, Holstein-Friesian Association.]

Year ended Apr. 30—	Bulls.	Cows.	Total.	Year ended Apr. 30—	Bulls.	Cows.	Total.
1900.....	1,365	3,381	4,746	1911.....	12,472	20,417	32,889
1901.....	1,460	3,648	5,108	1912.....	13,743	23,792	37,535
1902.....	1,738	4,252	5,990	1913.....	16,364	26,951	43,315
1903.....	2,088	4,753	6,841	1914.....	18,336	29,750	48,086
1904.....	2,477	5,567	8,044	1915.....	25,617	42,063	67,680
1905.....	3,226	6,547	9,773	1916.....	26,116	46,549	72,665
1906.....	3,842	7,918	11,760	1917.....	24,749	49,098	73,847
1907.....	4,841	9,809	14,650	1918.....	28,730	59,549	88,279
1908.....	5,684	10,850	16,534	1919.....	30,298	60,589	90,887
1909.....	7,021	12,570	19,591	1920.....	36,791	77,712	114,503
1910.....	9,689	16,487	26,176	1921.....	39,585	88,265	127,850

TABLE 24.—Number of cattle registered by the American Jersey Cattle Club for the years 1900 to 1921.

[Secretary, American Jersey Cattle Club.]

Year.	Bulls.	Cows.	Total.	Year.	Bulls.	Cows.	Total.
1900.....	2,798	8,750	11,548	1911.....	7,229	16,282	23,511
1901.....	2,567	8,045	10,612	1912.....	7,562	16,591	24,153
1902.....	2,471	7,580	10,051	1913.....	9,147	19,481	28,628
1903.....	2,370	7,240	9,610	1914.....	10,079	22,861	32,940
1904.....	2,373	7,464	9,837	1915.....	9,475	22,957	32,432
1905.....	2,640	7,735	10,375	1916.....	10,242	24,997	35,239
1906.....	3,019	8,652	11,671	1917.....	14,446	33,960	48,406
1907.....	3,752	9,383	13,135	1918.....	8,904	25,398	34,302
1908.....	4,148	10,135	14,283	1919.....	10,906	30,424	41,330
1909.....	5,249	12,513	17,762	1920.....	11,669	32,162	43,831
1910.....	6,333	14,509	20,842	1921.....	11,213	31,123	42,336

TABLE 25.—Number of COW-TESTING and BULL ASSOCIATIONS in the United States.

[Dairy Division, Bureau of Animal Industry.]

Year.	Cow-testing associations.	Bull associations.	Year.	Cow-testing associations.	Bull associations.
1906	1	None.	1914	163	14
1907	4	None.	1915	211	15
1908	6	3	1916	346	24
1909	25	8	1917	459	36
1910	40	9	1918	353	44
1911	64	11	1919	385	78
1912	82	11	1920	468	123
1913	100	12	1921	452	158

Number of bulls per bull association, average in each of the three years 1918, 1919, 1920, was 5.

Number of cows per bull association, average for the 3-year period, 233.

Number of cows per block in bull associations, average for the 3-year period, 48.

Number of members per bull association, average for the 3-year period, 38.

Number of herds per cow-testing association, average for the 3-year period, 26.2.

Number of cows per cow-testing association, average for the 3-year period, 448.

TABLE 26.—Average of 120 sets of yearly records of 96 COW-TESTING ASSOCIATIONS in the United States for the years 1910 to 1920, inclusive.

[Dairy Division, Bureau of Animal Industry.]

	Cows on test 4 months and not more than 12.		Cows on test 4 months and not more than 12.
Number of cows	41,990	Cost of roughage	$32.03
Number of cow-years [1]	37,362	Cost of grain	21.03
Pounds of milk	5,989	Total feed cost	53.06
Butterfat (per cent)	4.12	Income over cost of feed	59.33
Pounds of fat	247	Returns for $1 expended for feed	2.11
Price of butterfat	$0.46		
Value of product	112.39		

[1] A cow-year may be the record of 1 cow on test 12 months or it may be made up of the records of 2 or more cows, the sum of whose testing periods equals 12 months.

The average yield of American farm cows from year to year is estimated at nearly 4,000 pounds of milk, or 160 pounds of butterfat per year.

TABLE 27.—**Estimated number and capacity of SILOS in important dairy States for the year 1918.**

[Bureau of Markets and Crop Estimates.]

State.	Number of silos.	Average capacity.	Total capacity.
		Tons.	*Tons.*
New York	55,000	75	4,125,000
Pennsylvania	24,000	65	1,500,000
Ohio	25,000	67	1,675,000
Indiana	27,000	70	1,890,000
Illinois	30,000	79	2,370,000
Michigan	33,000	70	2,310,000
Wisconsin	55,000	87	4,785,000
Minnesota	15,000	95	1,425,000
Iowa	16,000	105	1,680,000
Missouri	13,000	90	1,170,000
Kansas	11,000	106	1,166,000
Kentucky	10,000	80	800,000
New England	35,000	67	2,345,000
All other States	55,000	77	4,235,000
United States	404,000	78	31,536,000

TABLE 28.—Total **MILK PRODUCTION** in the United States.

[Bureau of the Census.]

Year.	Milk production.	Remarks.
	Gallons.	
1869	235,500,599	Sold from farms.
1879	530,129,755	Do.
1889	5,209,125,567	
1899	7,728,583,349	Including milk from town cows.
1909	7,466,406,384	Estimate by Bureau of the Census.
1919	7,805,143,792	Do.

TABLE 29.—**Estimates of PRODUCTION and USES of MILK in the United States.**

[Dairy Division, Bureau of Animal Industry, and Bureau of Markets and Crop Estimates.]

[Million pounds—000,000 omitted.]

Product.	1917		1918		1919		1920	
	Lbs.	Per cent.	Lbs.	Per cent.	Lbs.	Per cent.	Lbs.	Per cent.
Total production	84,612	100	87,906	100	90,058	100	89,657	100
Creamery butter	34,664	41	16,800	19.1	18,375	20.4	18,135	20.2
Farm butter			14,910	16.9	14,385	16.0	14,175	15.8
Cheese	4,200	5	4,000	4.5	4,200	4.7	3,624	4.0
Condensed milk	2,438	2.9	4,000	4.5	4,813	5.3	3,945	4.4
Ice cream	3,150	3.7	3,300	3.8	3,450	3.8	3,575	4.0
Other products	.....	.....	50	.1	216	.2	222	0.2
Household use	36,500	43.1	38,900	44.3	38,619	42.9	39,090	43.6
Fed to calves	3,660	4.3	3,748	4.3	3,500	3.9	4,202	4.7
Waste or loss	.....	.....	2,198	2.5	2,500	2.8	2,689	3.0

TABLE 30.—**Number and breeds of ACCREDITED and ONCE-TESTED CATTLE, showing cattle free from tuberculosis, as indicated by tuberculin test, up to June 30, 1920.**

[U. S. Department of Agriculture; Circular 142 (YB.).]

Breed.	Once-tested without reacting.		In accredited herds.	
	Purebred.	Grade.	Purebred.	Grade.
Aberdeen Angus	3,286	2,095	2,072	594
Ayrshire	2,315	2,137	1,291	274
Brown Swiss	686	350	387	63
Devon	82	25	34	6
Dutch Belted	48	271	18	8
Galloway	123	143	38	40
Guernsey	9,049	15,538	6,651	6,003
Hereford	13,014	6,277	5,117	1,816
Polled Hereford	1,120	197	777	122
Holstein-Friesian	26,916	45,859	11,141	12,599
Jersey	18,045	56,160	10,369	9,525
Red Polled	1,675	1,265	1,189	155
Shorthorn	20,249	29,601	7,606	3,237
Milking Shorthorn	162	287	11	15
Polled Shorthorn	368	234	320	58
Total	97,138	160,439	47,021	34,515

A plan was adopted in 1917 by the Federal and State authorities to eradicate tuberculosis. This plan provides for "accredited herds."

An accredited herd is one which has been tuberculin-tested by the subcutaneous method, or any other test approved by the Bureau of Animal Industry, under the supervision of the Bureau of Animal Industry, or of a regularly employed veterinary inspector of a State in which cooperative tuberculosis-eradication work is conducted by the United States Department of Agriculture and the State. Further, it shall be a herd in which no animal affected with tuberculosis has been found upon two annual or three semiannual tuberculin tests, as described above, and by physical examination.

On June 30, 1921, there were in the United States 8,201 accredited herds and 49,814 once-tested free herds.

TABLE 31.—**PRICE of MILK in Chicago, net to farmer.**

[Milk News.]

Year.	Price per 100 pounds.	Year.	Price per 100 pounds.	Year.	Price per 100 pounds.
1897	$1.11	1905	$1.43	1913	$1.99
1898	1.13	1906	1.38	1914	2.00
1899	1.25	1907	1.62	1915	1.98
1900	1.35	1908	1.73	1916	2.03
1901	1.39	1909	1.72	1917	2.66
1902	1.40	1910	1.83	1918	3.22
1903	1.48	1911	1.90	1919	3.65
1904	1.43	1912	1.89	1920	3.49

TABLE 32.—Total annual RECEIPTS of MARKET MILK in New York City, Philadelphia, and Boston.

[Milk Reporter.]

Year.	New York City.	Philadelphia.	Boston.
	Gallons.	*Gallons.*	*Gallons.*
1893	85,910,050	.....	.....
1895	92,202,650	.....	.....
1900	115,022,450	.....	.....
1905	158,994,000	30,100,242	.....
1906	175,021,150	32,412,845	28,558,491
1907	179,966,900	33,982,797	27,470,547
1908	178,897,450	32,590,749	25,957,819
1909	187,091,700	36,198,715	27,020,734
1910	200,049,100	37,657,204	25,151,590
1911	212,170,850	40,625,144	22,523,193
1912	217,634,900	40,841,772	26,004,808
1913	225,675,950	43,354,701	23,826,712
1914	229,785,750	43,433,961	25,909,556
1915	240,144,450	44,607,224	27,376,987
1916	243,929,500	47,846,966	29,629,053
1917	246,597 650	46 714,093	35,180,444
1918	260,547,370	48,338,655	36,578,654
1919	279,686,190	53,953,142	39,177,071
1920	307,431,106	67,983,114	41,595,081
1921	326,316,250	74,266,288	42,348,423

The receipts at New York were in the form of whole milk, cream, and condensed milk.

In Boston the receipts were by railroad. Means of receipt in the other cities not stated. The totals for Boston from 1906 to 1916, inclusive, are from Massachusetts Public Document No. 60 (1917), and from 1917 to 1919, from E. M. Hartwell, statistician, Boston.

TABLE 33.—Prevailing New York price for Grade B milk, net to farmer.

[Milk Reporter.]

Year.	Average price per quart.	Year.	Average price per quart.	Year.	Average price per quart.
	Cents.		*Cents.*		*Cents.*
1875 [1]	3.58	1891	2.66	1907	3.35
1876	3.37	1892	2.68	1908	3.29
1877	3.27	1893	2.79	1909	3.38
1878 [1]	2.60	1894	2.63	1910	3.68
1879	2.33	1895	2.52	1911	3.36
1880	2.88	1896	2.34	1912	3.68
1881	2.94	1897	2.35	1913	3.53
1882	3.25	1898	2.38	1914	3.50
1883	3.26	1899	2.53	1915	3.50
1884	3.00	1900	2.74	1916	3.88
1885	2.79	1901	2.62	1917	5.68
1886	2.80	1902	2.88	1918	7.00
1887	2.81	1903	2.88	1919	7.58
1888	2.83	1904	2.75	1920	7.57
1889	2.59	1905	2.89	1921	6.42
1890	2.63	1906	3.01		

[1] Price in gold during period of inflated currency: 1875, 3.11 cents; 1876, 3.02 cents; 1877, 3.12 cents; 1878, 2.58 cents.

TABLE 34.—Unit requirements for producing 100 pounds of milk in different sections of the United States.

[Dairy Division, Bureau of Animal Industry.]

Item.	Indiana.[1]		Vermont.[2]		North Carolina.[3]	
Average yearly milk production per cow.....pounds..	6,937		5,252		4,915	
Per cent butterfat...	3.8		3.9		.....	
	Winter.	Summer.	Winter.	Summer.	Winter.	Summer.
Grain.....pounds..	38.6	20.0	33.1	8.7	57.8	48.4
Dry roughage.do....	66.8	27.4	129.9	18.7	78.5	36.9
Succulent roughage .....pounds..	147.6	60.1	191.3	27.8	181.5	87.0
Hauling and grinding concentrates...	$0.03	$0.14	$0.02	$0.005	.....	.....
Bedding...pounds..	20.3	.....	11.2	.....	$0.008	.....
Pasture.....acres..	.....	.04	.....	.10	.012	$0.205
Human labor .....hours..	2.5	2.2	2.7	2.0	3.6	3.2
Horse labor...do....	.3	.2	.6	.4	[5] 1.8	[5] 1.8
Other costs.....	$0.385	$0.393	$0.555	$0.425	$0.537	$0.495
Credit for calves .....part of calf..	.012	.013	.025	.009	$0.548	$0.430
Credit for manure .....pounds..	332	54	382	56		

Item.	Washington.[4]		Louisiana.[6]		Nebraska.[7]	
Average yearly milk production per cow.....pounds..	7,833		3,106		5,823	
Per cent butterfat...	3.7		4.4		3.65	
	Winter.	Summer.	Winter.	Summer.	Winter.	Summer.
Grain.....pounds..	29.4	5.2	72.4	52.5	41.2	11.0
Dry roughage.do....	92.9	7.5	38.3	1.9	95.3	51.2
Succulent roughage .....pounds..	143.3	40.4	78.4	8.1	93.6	29.3
Hauling and grinding concentrates...	$0.022	$0.003	$0.095	$0.050	$0.016	$0.004
Bedding...pounds..	9.0	.1	.3	.....	11.1	.5
Pasture.....acres..	.....	.025	$0.155	$0.197	$0.108	$0.653
Human labor .....hours..	1.9	1.3	5.8	5.0	2.0	1.9
Horse labor...do....	.01	.015	.9	.7	.06	.08
Other costs.....	$0.576	$0.406	$1.220	$0.803	$0.869	$0.889
Credit for calves .....part of calf..	0.017	0.009	.033	.023	.02	.01
Credit for manure .....pounds..	115	13	128	78	244	20

[1] U. S. Dept. of Agric. Bul. 858.
[2] U. S. Dept. of Agric. Bul. 923.
[3] U. S. Dept. of Agric. Bul. 266.
[4] U. S. Dept. of Agric. Bul. 919.
[5] Farmers retailed own milk.
[6] U. S. Dept. of Agric. Bul. 955.
[7] U. S. Dept. of Agric. Bul. 972.

TABLE 35.—Production of DAIRY PRODUCTS in the United States for the year 1919, by months.

[Bureau of Markets and Crop Estimates.]

Month.	Creamery butter.	Whey butter.	American Cheddar cheese.			Swiss cheese (including block).
			Whole milk.	Part skim.	Full skim.	
1919.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Jan.	52, 198, 957	372, 478	10, 955, 738	610, 541	423, 537	131, 949
Feb.	44, 342, 568	225, 545	11, 854, 735	238, 703	430, 574	172, 335
Mar.	54, 822, 396	276, 892	19, 008, 970	495, 475	326, 297	269, 235
Apr.	67, 487, 317	383, 485	21, 641, 729	734, 953	588, 741	597, 794
May.	103, 941, 021	596, 694	34, 849, 069	900, 810	874, 757	2, 850, 662
June.	119, 357, 493	717, 123	44, 599, 120	942, 233	1, 448, 147	3, 910, 881
July.	104, 751, 266	694, 382	35, 465, 017	732, 809	821, 415	3, 440, 549
Aug.	84, 840, 310	657, 863	30, 940, 232	528, 176	710, 736	3, 227, 488
Sept.	69, 102, 578	597, 292	26, 256, 549	276, 674	528, 067	2, 629, 450
Oct.	58, 722, 557	424, 017	23, 114, 457	248, 049	378, 272	1, 860, 084
Nov.	45, 040, 656	430, 863	13, 106, 756	230, 276	249, 299	848, 190
Dec.	46, 662, 021	220, 674	10, 043, 643	250, 493	205, 514	448, 689
Total.	851, 269, 140	5, 597, 308	281, 836, 015	6, 189, 192	6, 985, 356	20, 387, 306

Month.	Brick and Münster cheese.	Limburger cheese.	Cottage, pot, and baker's cheese.	Cream and Neufchâtel cheese.	Italian varieties of cheese.	All other varieties of cheese.
1919.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Jan.	2, 636, 940	177, 294	2, 109, 591	450, 177	317, 446	513, 326
Feb.	2, 408, 269	210, 818	2, 443, 069	413, 916	298, 693	546, 372
Mar.	2, 668, 920	237, 678	2, 707, 964	474, 339	335, 177	769, 412
Apr.	3, 146, 302	502, 245	3, 701, 192	430, 193	358, 339	863, 582
May.	4, 039, 841	1, 220, 499	3, 214, 328	440, 168	457, 398	892, 360
June.	4, 334, 932	1, 301, 585	2, 925, 902	445, 583	451, 674	784, 094
July.	2, 872, 007	886, 299	2, 344, 858	506, 491	334, 639	661, 120
Aug.	2, 552, 768	874, 133	2, 201, 372	402, 011	312, 054	627, 851
Sept.	2, 462, 945	748, 086	1, 895, 083	376, 972	279, 230	703, 497
Oct.	3, 794, 110	703, 939	2, 180, 766	423, 218	329, 434	1, 264, 474
Nov.	3, 523, 507	473, 155	1, 855, 898	507, 611	256, 158	985, 499
Dec.	3, 080, 463	289, 810	2, 205, 306	629, 960	257, 119	1, 049, 910
Total.	37, 521, 004	7, 625, 541	29, 785, 329	5, 500, 639	3, 987, 361	9, 661, 497

NOTE.—This table is not quite complete, as a few reports were received after it was made. For final total butter figures see Table 40; for total cheese made see Table 51; and for condensed and evaporated milk see Table 61.

The figures in Tables 35 and 36 are taken from the Market Reporter (published by the Bureau of Markets and Crop Estimates), Apr. 3, 1920. They include only such factories as reported for both 1918 and 1919, and represent about 93 per cent of the total number of factories.

See Table 39 for total creamery butter; and Table 40 for total creamery and whey butter.

TABLE 36.—Production of CONDENSED and EVAPORATED MILK in the United States for the year 1919, by months.

[Bureau of Markets and Crop Estimates.]

Month.	Sweetened condensed skimmed milk.	Unsweetened evaporated skimmed milk.	Sweetened condensed whole milk.	Unsweetened evaporated whole milk.	Evaporated part or full skimmed milk.[1]	Sterilized whole milk canned.
1919.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Jan..	3,832,759	4,875,107	25,895,736	79,439,812	3,563,179	1,624,930
Feb..	4,593,977	3,562,550	39,800,837	86,537,731	2,704,232	451,308
Mar..	6,860,862	3,986,734	55,610,443	101,817,221	3,876,562	515,862
Apr..	8,196,677	5,479,228	68,104,344	108,471,199	5,026,025	616,811
May .	11,028,637	6,936,653	70,403,079	132,668,917	5,983,285	568,767
June .	7,751,023	9,138,584	64,019,406	153,672,555	6,795,121	Not given.
July .	4,844,922	8,875,537	56,398,758	124,538,296	5,469,322	46,277
Aug..	4,109,201	7,170,623	46,328,941	105,400,617	5,763,975	105,743
Sept .	3,963,454	5,453,851	49,025,772	92,619,308	4,973,701	90,443
Oct ..	3,878,855	5,250,629	50,688,945	89,631,504	7,114,632	385,706
Nov .	4,285,022	4,371,289	41,730,538	77,490,891	6,523,220	3,859
Dec..	5,677,937	3,967,673	37,154,100	81,914,071	7,217,091	5,112
Total.	69,023,326	69,068,458	605,160,899	1,234,202,122	65,010,345	4,414,818

[1] Modified with foreign fats.

The figures in Tables 35 and 36 are taken from the Market Reporter (published by the Bureau of Markets and Crop Estimates), Apr. 3, 1920. They include only such factories as reported for both 1918 and 1919, and represent about 93 per cent of the total number of factories.

For total condensed and evaporated milk, see Table 61.

TABLE 37.—PRODUCTION and EXPORTATION of RENOVATED BUTTER, by years.

[Bureau of Internal Revenue and Dairy Division, Bureau of Animal Industry.]

Year ended June 30—	Factories.[1]	Production.	Exports.	Year ended June 30.	Factories.[1]	Production.	Exports.
		Pounds.	*Pounds.*			*Pounds.*	*Pounds.*
1902..	55	No record.	No record	1912..	39	46,387,398	952,516
1903..	81	54,658,790	1,312,000	1913..	39	38,354,762	75,037
1904..	77	54,171,183	3,118,018	1914..	34	32,470,030	674,780
1905..	78	60,029,421	3,864,146	1915..	29	39,056,180	1,918,015
1906..	64	53,549,900	11,005,537	1916..	28	34,514,527	133,300
1907..	51	62,965,613	5,538,410	1917..	22	27,507,982	635,038
1908..	49	50,479,489	1,271,610	1918..	19	19,270,933	17,340
1909..	49	47,345,361	1,115,288	1919..	15	17,358,718	41,200
1910..	42	47,433,575	41,850	1920..	11	9,735,214	8,110
1911..	45	39,292,591	118,890	1921..	11	6,099,110	4,055

[1] Total number of factories at end of fiscal year.

Production is taken from reports of the Bureau of Internal Revenue; and exports are taken from the reports of inspectors of the Dairy Division, Bureau of Animal Industry, Department of Agriculture.

TABLE 38.—DAIRY PRODUCTS made during 1919 in FACTORIES in the United States, by States.

[Bureau of Markets and Crop Estimates.]

State.	Creamery butter.[1]	Factory cheese.[2]	Condensed and evaporated milk.[3]
	Pounds.	*Pounds.*	*Pounds.*
Alabama	696,215	----------	1,129,304
Arizona	1,000,118	463,717	16,363,677
Arkansas	363,384	----------	----------
California	61,795,295	8,940,302	78,636,340
Colorado	13,144,464	507,696	16,903,909
Connecticut	929,551	111	26,559
Delaware	253,286	200,237	----------
District of Columbia	5,375	----------	----------
Florida	16,755	----------	76,138
Georgia	315,802	----------	----------
Idaho	4,514,263	2,582,428	11,093,091
Illinois	44,621,358	6,294,871	188,950,296
Indiana	44,658,534	185,230	23,662,666
Iowa	87,914,633	954,425	6,653,397
Kansas	35,642,291	25,498	19,834,406
Kentucky	5,321,193	----------	----------
Louisiana	46,409	1,100	----------
Maine	1,140,850	----------	6,894,304
Maryland	315,305	237,926	9,111,194
Massachusetts	2,849,270	106,675	2,215,243
Michigan	45,206,770	7,690,485	198,651,629
Minnesota	130,785,598	9,766,750	2,360,121
Mississippi	2,476,787	----------	----------
Missouri	38,411,403	304,983	39,831
Montana	5,389,032	318,398	----------
Nebraska	60,467,056	39,343	3,071,270
Nevada	1,725,494	----------	----------
New Hampshire	397,198	258,843	76,332
New Jersey	178,796	856,195	10,571,144
New Mexico	5,673	----------	----------
New York	13,715,704	68,855,452	443,540,879
North Carolina	829,286	228,765	----------
North Dakota	14,696,566	----------	----------
Ohio	60,573,159	4,546,836	123,442,732
Oklahoma	10,481,270	7,550	----------
Oregon	14,431,827	8,465,306	33,947,234
Pennsylvania	12,445,578	6,307,821	181,897,826
Rhode Island	65,392	4,294	211
South Carolina	26,580	348	----------
South Dakota	17,478,570	56,348	----------
Tennessee	3,735,157	51,033	960
Texas	8,288,644	17,603	11,644
Utah	3,796,394	914,605	20,479,439
Vermont	10,676,538	3,581,569	38,997,068
Virginia	1,597,340	59,991	5,221,714
Washington	18,486,591	1,257,254	129,482,526
West Virginia	328,160	55,750	400,122
Wisconsin	85,054,334	263,481,352	457,214,442
Wyoming	1,139,556	1,612,356	----------
Total	868,124,806	399,239,446	2,030,957,648

[1] See Tables 34, 35 and 40 for whey butter.

[2] Cottage, pot, and baker's cheese are not included under cheese.

[3] Sterilized canned milk, condensed buttermilk, and milk modified with foreign fats are not included in this table. Production of sterilized canned milk for 1919 was 4,420,713 pounds.

NOTE.—A few reports were made after this table was made; see Tables 40, 51, and 61 for final totals.

TABLE 39.—DAIRY PRODUCTS made during 1920 in FACTORIES in the United States, by States.

[Bureau of Markets and Crop Estimates.]

State.	Creamery butter.	Factory[1] cheese.	Condensed and evaporated milk.[2]
	Pounds.	*Pounds.*	*Pounds.*
Alabama	398,000	.....	223,000
Arkansas	345,000	.....	.....
Arizona	828,000	227,000	3,452,000
California	61,870,000	8,518,000	83,464,000
Colorado	12,979,000	531,000	15,708,000
Connecticut	877,000	.....	.....
Delaware	350,000	147,000	.....
District of Columbia	503,000	.....	.....
Florida	.....	.....	.....
Georgia	7,000	.....	.....
Idaho	4,660,000	1,727,000	15,412,000
Illinois	41,051,000	3,965,000	120,987,000
Indiana	39,223,000	187,000	24,007,000
Iowa	84,290,000	636,000	5,637,000
Kansas	32,899,000	19,000	19,004,000
Kentucky	7,875,000	.....	240,000
Louisiana	55,000	.....	.....
Maine	727,000	.....	1,972,000
Maryland	440,000	107,000	7,022,000
Massachusetts	3,198,000	77,000	2,383,000
Michigan	45,404,000	6,567,000	160,236,000
Minnesota	120,297,000	5,841,000	1,884,000
Mississippi	2,626,000	.....	.....
Missouri	35,228,000	380,000	.....
Montana	5,168,000	295,000	.....
Nebraska	56,661,000	3,000	182,000
Nevada	2,018,000	.....	.....
New Hampshire	300,000	700,000	.....
New Jersey	143,000	693,000	4,819,000
New Mexico	6,000	.....	.....
New York	16,949,000	53,216,000	288,390,000
North Carolina	832,000	109,000	.....
North Dakota	13,419,000	.....	.....
Ohio	65,594,000	2,957,000	113,231,000
Oklahoma	3,596,000	.....	.....
Oregon	14,288,000	8,482,000	31,763,000
Pennsylvania	11,422,000	6,245,000	140,002,000
Rhode Island	58,000	.....	.....
South Carolina	16,000	.....	.....
South Dakota	14,071,000	9,000	.....
Tennessee	5,903,000	26,000	.....
Texas	9,125,000	3,000	246,000
Utah	3,567,000	855,000	16,943,000
Vermont	13,253,000	1,850,000	26,010,000
Virginia	2,210,000	35,000	5,651,000
Washington	23,751,000	1,463,000	83,690,000
West Virginia	367,000	29,000	889,000
Wisconsin	97,355,000	255,286,000	410,195,000
Wyoming	875,000	1,203,000	.....
Total	863,577,000	362,431,000	1,583,638,000

[1] Cheese does not include either cottage, baker's, or pot cheese.

[2] Condensed and evaporated milk does not include condensed buttermilk or milk modified with foreign fats; but does include sterilized canned milk.

TABLE 40.—Total PRODUCTION of farm and factory BUTTER in the United States.

[Census Bureau and Bureau of Markets and Crop Estimates.]
[c=census. m=markets.]

Year.	Creamery and whey butter.	Farm-made butter.	Total butter.
	Pounds.	*Pounds.*	*Pounds.*
1849 c	.....	313,345,306	313,345,306
1859 c	.....	459,681,372	459,681,372
1869 c	.....	514,092,683	514,092,683
1879 c	29,421,784	777,250,287	806,672,071
1889 c	181,284,916	1,024,223,468	1,205,508,384
1899 c	420,954,016	1,071,745,127	1,492,699,143
1904 c	531,478,141	.....	.....
1909 c	627,145,865	994,650,610	1,621,796,475
1914 c	786,003,489	.....	.....
1916 m	760,030,573	.....	.....
1917 m	743,895,068	.....	.....
1918 m	822,718,916	.....	.....
1919 m	[1] 873,907,132	.....	.....
1919 c	938,505,382	707,666,492	1,646,171,874
1920 m	[1] 866,662,978	.....	.....

[1] Whey butter included in Bureau of Markets reports for 1918, 1919, and 1920. Production of whey butter in 1918, 5,510,213; 1919, 5,597,308; 1920, 3,085,978.

TABLE 41.—Total number of CREAMERIES in the United States.

[Dairy Division, Bureau of Animal Industry.]

Year.	Number of creameries.	Year.	Number of creameries.	Year.	Number of creameries.
1908	5,431	1913	4,859	1918	[1] 4,000
1909	5,123	1914	4,637	1919	[1] 4,000
1910	5,030	1915	4,518	1920	[1] 3,500
1911	4,838	1916	5,821		
1912	4,751	1917	[1] 4,000		

[1] The Dairy Division record of the number of creameries was discontinued with the year 1916. The later figures are estimated by the Bureau of Markets.

TABLE 42.—Production of POWDERED MILK PRODUCTS in the United States for the year 1919, by months.

[Bureau of Markets and Crop Estimates.]

Month.	Whole-milk powder.	Skim-milk powder.	Cream powder.	Malted milk.
1919.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
January	277,426	1,606,854	49,685	1,649,002
February	801,865	1,807,397	43,444	1,599,413
March	739,185	2,899,490	69,338	1,835,124
April	612,272	3,711,441	104,876	1,676,726
May	1,093,084	4,506,141	53,424	1,423,864
June	832,669	4,102,868	23,704	1,306,489
July	1,036,194	3,343,393	68,458	1,178,746
August	977,772	3,199,303	87,754	1,020,772
September	868,465	2,372,636	38,832	1,143,352
October	294,598	2,230,808	19,301	1,504,594
November	522,974	1,472,701	230	1,596,889
December	604,281	1,823,099	33,024	1,560,916
Total	8,660,785	33,076,131	592,070	17,495,887

Month.	Buttermilk powder.	Dried casein (lactarene).[1]	Crude milk sugar (lactose).
1919.	*Pounds.*	*Pounds.*	*Pounds.*
January	300,734	519,861	194,897
February	237,685	718,024	204,625
March	298,481	1,117,961	440,318
April	399,891	1,972,017	592,848
May	1,007,857	1,973,198	719,719
June	786,146	1,905,882	799,639
July	601,178	1,580,416	752,071
August	438,554	1,104,200	656,987
September	341,810	860,643	508,539
October	349,694	822,604	502,899
November	242,819	638,207	442,342
December	273,978	711,823	406,458
Total	5,278,827	13,924,836	6,221,342

[1] Dried casein includes both skim-milk and buttermilk casein, the skim-milk casein amounting to 13,202,685 pounds and the buttermilk casein to 722,151 pounds.

These figures represent the production of practically all the factories.

TABLE 43.—Quantities of MILK, BUTTER, and CHEESE produced on farms during 1919 and number of DAIRY COWS and YIELD of milk per cow.

[Bureau of the Census.]

State.	Milk produced on farms.	Farm butter.	Farm cheese.	Dairy cows.	Yield per cow.
	Gallons.	*Pounds.*	*Pounds.*		*Lbs.*
Alabama	93,903,677	28,490,181	5,210	394,112	1,944
Arizona	14,370,833	593,446	90,119	31,619	3,724
Arkansas	87,623,651	25,571,098	8,603	415,507	1,634
California	276,424,216	5,757,759	2,345,672	502,415	4,610
Colorado	79,492,631	5,775,602	157,186	192,234	2,993
Connecticut	54,894,287	1,926,127	90,500	112,622	4,128
Delaware	11,356,313	894,883	3,170	33,026	2,924
Dist. of Col	512,074	6,020	.....	704	6,218
Florida	12,155,533	1,162,383	3,156	71,641	1,307
Georgia	101,615,773	30,257,153	1,365	388,448	2,124
Idaho	52,365,498	4,540,364	31,684	115,336	3,560
Illinois	370,486,981	25,063,897	117,830	957,313	3,044
Indiana	238,793,861	18,344,239	109,234	608,211	3,044
Iowa	361,426,362	25,422,675	53,273	897,668	2,709
Kansas	221,454,417	17,455,879	19,657	574,257	3,311
Kentucky	146,561,464	34,080,415	13,643	441,346	2,666
Louisiana	32,972,720	4,252,318	5,972	176,936	1,324
Maine	77,676,381	10,855,560	55,161	175,425	3,724
Maryland	58,754,193	6,162,501	126,190	161,972	3,036
Massachusetts	76,316,309	2,019,231	60,796	147,331	4,352
Michigan	382,822,631	25,775,423	76,660	802,095	3,965
Minnesota	475,506,689	20,205,076	71,820	1,229,179	3,044
Mississippi	88,191,680	20,758,736	2,783	427,406	1,591
Missouri	228,907,721	29,470,763	90,435	661,959	2,339
Montana	51,251,095	5,961,336	43,223	127,581	2,864
Nebraska	168,083,367	13,761,085	23,117	438,459	2,528
Nevada	6,312,105	266,027	22,927	13,349	3,854
New Hamp	42,556,285	3,240,368	32,469	95,997	3,689
New Jersey	70,490,729	1,600,789	92,984	130,497	3,027
New Mexico	12,737,649	1,404,138	87,087	37,805	2,210
New York	756,045,942	24,727,662	521,445	1,481,918	4,317
North Carolina	95,747,638	25,551,506	16,168	290,223	2,666
North Dakota	138,606,540	14,413,180	50,065	370,707	2,657
Ohio	396,317,787	30,264,265	434,042	888,057	3,603
Oklahoma	135,820,769	22,214,546	11,116	456,332	2,012
Oregon	92,844,946	4,177,628	43,898	180,462	4,136
Pennsylvania	421,631,355	38,468,607	532,238	885,855	3,990
Rhode Island	12,099,111	174,902	10,410	21,431	4,730
South Carolina	52,954,637	13,846,353	171	187,846	2,348
South Dakota	124,427,638	10,267,171	10,591	336,892	2,339
Tennessee	130,285,934	37,166,063	114,386	415,128	2,494
Texas	202,974,353	49,405,152	107,683	833,586	1,840
Utah	29,339,512	2,876,675	73,606	66,724	3,466
Vermont	122,095,734	3,877,039	75,502	290,122	3,560
Virginia	110,942,113	25,476,621	39,765	357,969	2,511
Washington	140,524,518	5,899,678	84,868	238,270	4,911
West Virginia	73,690,103	17,715,107	88,562	181,206	2,984
Wisconsin	858,258,521	8,666,037	308,117	1,795,122	4,016
Wyoming	14,613,581	1,422,822	6,837	34,997	2,692
Total	7,805,238,069	707,666,492	6,371,396	19,675,297	3,412

TABLE 44.—CREAMERY BUTTER in STORAGE on the first of each month.

[Bureau of Markets and Crop Estimates. Thousand pounds—000 omitted.]

Month.	1915	1916	1917	1918	1919	1920	1921
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Jan.	.....	48,977	46,134	50,726	43,910	53,737	58,682
Feb.	.....	31,139	30,474	26,618	36,777	38,359	41,486
Mar.	.....	15,033	16,952	18,808	24,191	22,568	27,103
Apr.	.....	3,346	6,805	14,629	11,909	12,555	14,732
May	.....	1,082	3,607	9,536	9,659	7,554	7,712
June	.....	7,017	9,953	12,698	29,435	12,872	21,682
July	.....	53,863	49,982	49,140	90,158	52,526	62,168
Aug.	68,578	102,537	88,992	88,305	123,546	101,455	82,838
Sept.	101,662	105,836	108,179	99,334	131,388	115,558	92,396
Oct.	99,450	100,522	109,154	87,883	121,816	113,385	90,123
Nov.	92,719	85,260	100,115	80,874	100,474	101,778	77,893
Dec.	71,849	67,292	79,928	65,111	73,654	79,750	65,138

NOTE.—Cold storage in connection with butter in this table means the holding of butter at a temperature of 45° F. or less for a period of at least 30 days.

TABLE 45.—RECEIPTS of BUTTER on New York, Chicago, and San Francisco markets.

[Trade journals and Bureau of Markets and Crop Estimates.[2]]

Year.	New York.	Chicago.	San Francisco.
	Pounds.[1]	*Pounds.*[1]	*Pounds.*
1865	36,428,160	.....	.....
1870	33,178,380	.....	.....
1880	89,640,900	.....	8,844,900
1890	110,622,120	.....	.....
1900	119,932,440	86,677,560	15,234,145
1905	144,582,960	105,179,640	17,936,782
1910	131,477,880	184,880,160	13,934,200
1911	139,469,294	189,289,320	19,033,600
1912	141,176,002	154,075,560	23,548,850
1913	146,874,184	145,348,080	23,905,100
1914	154,176,822	152,353,920	22,580,950
1915	165,044,980	180,303,840	28,396,200
1916	176,939,340	169,643,400	27,694,300
1917	155,760,540	169,078,140	24,915,500
1918	168,276,000	143,982,120	22,946,900
1919	226,698,000	185,779,000	22,031,000
1920	164,608,000	176,746,000	23,566,000
1921	212,948,000	193,591,000	25,566,000

[1] Estimated at 60 pounds per tub. [2] Bureau reports began in 1919.

TABLE 46.—IMPORTS and EXPORTS of BUTTER.

[Commerce and Navigation Reports; (YB.)]

Year ended June 30—	General imports.[1]		Domestic exports.[1]	
	Pounds.	*Value.*	*Pounds.*	*Value.*
1851	479,180	$37,536	3,994,542	$516,812
1860	3,278,967	506,185	7,640,914	1,144,321
1870	4,089,038	832,829	2,019,288	592,229
1880	487,120	95,122	39,236,658	6,690,687
1890	75,521	13,679	29,748,042	4,187,489
1900	49,791	9,769	18,266,371	3,143,509
1910	1,360,245	298,023	3,140,545	785,771
1911	1,007,826	247,961	4,877,797	1,059,432
1912	1,025,668	237,154	6,092,235	1,468,432
1913	1,162,253	304,090	3,585,600	872,804
1914	7,842,022	1,753,461	3,693,597	877,453
1915	3,828,227	977,262	9,850,704	2,392,480
1916	712,998	212,370	13,487,481	3,590,105
1917	523,573	192,767	26,835,092	8,749,170
1918	1,805,925	619,303	17,735,966	6,852,727
1919	4,131,469	1,869,132	33,739,960	15,843,522
1920	20,770,959	10,916,770	27,155,834	15,491,682
1920 [2]	37,454,172	18,646,456	17,487,735	10,142,403
1921 [2]	18,558,388	7,392,247	8,014,737	3,269,609

[1] See explanatory notes at beginning of bulletin.
[2] Year ended Dec. 31. The Commerce and Navigation Reports are now made by years ending Dec. 31

TABLE 47.—Average weekly QUOTATIONS for highest grade of BUTTER on the San Francisco market.

[Pacific Dairy Review and Bureau of Markets and Crop Estimates.[1]]

Year.	Averge price per pound.	Year.	Average price per pound.	Year.	Average price per pound.
	Cents.		*Cents.*		*Cents.*
1899	22.9	1907	30.5	1915	26.3
1900	23.0	1908	27.4	1916	28.9
1901	21.2	1909	30.6	1917	39.9
1902	25.5	1910	31.4	1918	52.2
1903	27.9	1911	27.1	1919	57
1904	23.5	1912	31.2	1920	60.2
1905	24.7	1913	31.7	1921	36.3
1906	25.8	1914	27.0		

[1] Prices by Bureau of Markets and Crop Estimates began in 1919.

TABLE 48.—**Average monthly PRICE of CREAMERY BUTTER, extras or equivalent grade, on New York market.**

[New York Produce Review and Bureau of Markets and Crop Estimates.]

Month.	1900	1901	1902	1903	1904	1905	1906
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
January	26.8	22.8	24.1	27.3	22.7	29.1	26.5
February	24.9	22.5	28.3	26.6	25.1	32.1	27.1
March	24.9	22.1	28.2	28.4	24.5	28.0	27.0
April	16.3	21.0	28.8	26.6	22.8	30.0	21.8
May	20.1	19.0	22.7	22.0	20.1	23.7	20.1
June	19.4	19.3	22.0	21.7	18.0	20.4	20.2
July	19.5	19.7	21.3	20.1	17.6	20.5	20.6
August	20.8	20.3	19.9	19.3	17.9	21.1	22.5
September	21.5	20.9	21.6	20.6	19.4	20.6	24.6
October	21.8	20.0	24.0	21.3	20.9	21.8	26.1
November	24.9	24.1	26.6	23.1	24.8	23.6	27.6
December	25.3	25.0	29.1	24.2	26.8	24.3	31.6
Average	22.2	21.4	24.7	23.4	21.7	24.6	24.6

Month.	1907	1908	1909	1910	1911	1912	1913
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
January	30.8	31.5	32.2	34.4	28.0	39.1	35.1
February	32.5	32.8	31.0	30.6	28.0	31.7	36.3
March	30.6	29.3	30.0	33.5	25.5	31.1	36.7
April	30.6	29.0	27.9	32.0	22.1	32.8	34.5
May	25.0	24.2	27.0	29.0	22.8	[2] 30.4	28.6
June	23.6	23.8	26.3	28.5	23.8	27.3	27.8
July	24.8	22.9	26.7	29.1	25.9	27.1	27.0
August	[1] 25.5	23.3	27.7	30.3	27.3	26.6	27.9
September	28.3	24.5	31.0	31.2	27.6	29.7	31.5
October	29.2	27.4	31.6	31.4	31.4	31.2	31.4
November	27.7	30.3	31.9	32.5	34.8	34.4	33.8
December	29.8	32.0	36.0	30.9	37.8	37.2	36.1
Average	28.1	27.6	29.9	31.1	27.9	31.6	32.2

Month.	1914	1915	1916	1917	[3] 1918	1919	1920	1921
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
January	32.6	33.5	32.6	40.1	52	62	65	52.5
February	29.3	32.3	33.8	43.5	50	52	66	47.2
March	27.7	29.7	36.9	41.6	44	62	67	48.1
April	25.4	30.7	36.0	44.2	42	64	71	45.5
May	26.1	28.8	31.0	40.2	42	58	61	31.8
June	27.2	28.2	29.8	39.1	44	52	57	32.7
July	27.9	27.0	28.9	39.0	45	53	57	40.4
August	30.4	25.9	31.2	41.3	46	55	55	42.7
September	31.4	26.6	33.9	44.3	56	59	59	43.1
October	31.6	28.6	35.4	44.6	59	68	60	47.0
November	34.7	31.1	39.4	45.5	63	71	63	44.9
December	33.9	35.1	39.8	49.4	69	72	55	43.8
Average	29.8	29.8	34.9	42.7	51	61	61	43.3

[1] Aug. 5, 1907, "extras" changed to "specials."
[2] "Extras" and "firsts" took place of "specials" May 13, 1912.
[3] Prices by Bureau of Markets and Crop Estimates began in 1918.

TABLE 49.—AVERAGE PRICE of BUTTER on New York market—grade of extras.

[New York Produce Review and Bureau of Markets and Crop Estimates.]

Year.	Average price.		Year.	Average price.		Year.	Average price.	
	Market quotation.	Price in gold during period of currency inflation.		Market quotation.	Price in gold during period of currency inflation.		Market quotation.	Price in gold during period of currency inflation.
	Cents.	*Cents.*		*Cents.*			*Cents.*	*Cents.*
1866..	51.1	36.3	1885..	26.8	.....	1904..	21.7	.....
1867..	41.6	30.1	1886..	27.4	.....	1905..	24.6	.....
1868..	49.9	35.7	1887..	26.9	.....	1906..	24.6	.....
1869..	47.3	35.5	1888..	27.3	.....	1907..	28.1	.....
1870..	40.3	35.0	1889..	24.3	.....	1908..	27.6	.....
1871..	35.5	31.8	1890..	23.6	.....	1909..	29.9	.....
1872..	34.7	30.9	1891..	26.2	.....	1910..	31.1	.....
1873..	39.4	34.5	1892..	26.4	.....	1911..	27.4	.....
1874..	41.8	37.6	1893..	27.2	.....	1912..	31.6	.....
1875..	34.8	30.3	1894..	22.3	.....	1913..	32.2	.....
1876..	34.5	31.0	1895..	21.3	.....	1914..	29.8	.....
1877..	30.6	29.2	1896..	18.4	.....	1915..	29.8	.....
1878..	28.3	28.1	1897..	19.1	.....	1916..	34.9	.....
1879..	25.5	.....	1898..	19.5	.....	1917..	42.7	.....
1880..	30.5	.....	1899..	21.2	.....	1918..	[1]51.0	.....
1881..	32.0	.....	1900..	22.2	.....	1919..	61.0	.....
1882..	35.5	.....	1901..	21.4	.....	1920..	61.0	.....
1883..	31.0	.....	1902..	24.7	.....	1921..	43.3	.....
1884..	30.1	.....	1903..	23.4	.....			

[1] Prices by Bureau of Markets and Crop Estimates began in 1918.

TABLE 50.—CHEESE production in the United States by kinds.

[Bureau of Markets and Crop Estimates.]

Kinds of cheese made.	1916	1917	1918	1919	1920
Cheddar:	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Whole milk	227,032,328	274,945,880	247,276,503	281,836,015	242,195,707
Part skim	7,856,189	8,058,216	9,102,159	6,189,192	4,346,400
Full skim	4,726,450	5,149,557	6,610,993	6,985,356	6,365,267
Swiss	15,317,466	15,435,097	18,586,505	21,601,782	20,430,000
Limburger	9,623,315	9,798,247	8,808,140	7,625,541	7,170,388
All Italian	Not given.	Not given.	2,042,234	3,987,361	4,677,525
Brick and Münster	41,552,388	45,922,624	43,332,215	37,521,004	40,687,832
Cream and Neufchâtel	Not given.	Not given.	5,774,630	5,500,639	6,858,952
All others	8,608,603	13,232,582	11,088,236	9,661,497	12,087,125

The Italian, Cream, and Neufchâtel cheeses are included in "All others" for the years 1916 and 1917.

TABLE 51.—Total PRODUCTION of farm and factory CHEESE in the United States.

[Census Bureau and Bureau of Markets and Crop Estimates—c=census. m=markets.]

Year.	Factory cheese.	Farm cheese.	Total cheese.
	Pounds.	*Pounds.*	*Pounds.*
1849 c		105,535,893	105,535,893
1859 c		103,663,927	103,663,927
1869 c	109,435,229	53,492,153	162,927,382
1879 c	215,885,361	27,272,489	243,157,850
1889 c	238,035,065	18,726,818	256,761,883
1899 c	282,634,488	16,372,330	299,006,818
1904 c	317,144,872		
1909 c	311,175,730	9,405,864	320,581,594
1914 c	377,513,409		
1916 m	314,716,739		
1917 m	372,540,203		
1918 m	352,621,615		
1919 m	379,319,548		
1919 c	475,330,820	6,600,000	481,930,820
1920 m	362,431,000		

There are no records of farm-made cheese except for census years. For production of cheese by States see Tables 38, 39, and 43. Cottage cheese is included in census figures but not in markets figures.

TABLE 52.—DOMESTIC SWISS CHEESE production for 1919 and 1920, by States.

[Bureau of Markets and Crop Estimates.]

State.	Number of factories.[1]	Production.	
		1919	1920
		Pounds.	*Pounds.*
Wisconsin	232	14,328,204	14,396,000
Ohio	56	3,030,357	2,208,000
New York	11	1,528,704	1,634,000
Illinois	23	947,526	590,000
California	3	938,694	685,000
Pennsylvania	3	813,041	800,000
Indiana	1	12,336	39
Oregon	1	1,610	37,000
Michigan	1	1,300	
Washington	1	10	
Total	353	21,601,782	20,430,000

[1] These are all the factories producing domestic Swiss cheese

TABLE 53.—**Amount and value of CHEESE IMPORTED into the United States from France, Greece, Italy, and Switzerland.**

[Commerce and Navigation Reports.]

Year ended June 30—	France.		Greece.	
	Pounds.	Value.	Pounds.	Value.
1910	3,673,117	$704,685	1,777,819	$230,031
1911	3,756,155	728,126	2,598,474	343,678
1912	3,882,891	942,683	2,703,745	409,990
1913	3,982,513	785,965	2,089,079	321,182
1914	5,418,904	1,032,817	3,212,908	447,124
1915	3,554,297	737,212	3,003,349	402,952
1916	2,321,543	784,323	1,132,200	169,536
1917	1,937,341	754,012	83,632	18,089
1918	1,026,117	528,926	None.	
1919	404,722	349,331	None.	
1920	810,948	396,977	7,366	2,801
1921	2,417,036	926,343	84,716	34,028
Total	33,185,584	8,671,400	16,693,288	2,379,411

Year ended June 30—	Italy.		Switzerland.	
	Pounds.	Value.	Pounds.	Value.
1910	17,122,124	$3,175,640	14,105,458	$2,372,134
1911	18,647,412	3,381,546	15,507,767	2,758,854
1912	20,625,202	3,948,550	15,147,393	2,857,631
1913	21,326,445	4,217,674	17,371,616	3,183,350
1914	26,453,626	5,024,270	22,489,706	3,617,657
1915	25,662,362	5,108,850	14,766,682	2,677,249
1916	16,084,058	3,855,856	9,514,008	2,031,590
1917	8,482,280	2,545,286	1,640,656	341,063
1918	16,044	7,883		
1919	57	23		
1920	1,095,740	274,970	607,476	304,239
1921	1,185,912	396,484	1,068,100	399,329
Total	156,701,262	35,792,882	112,218,862	20,443,096

TABLE 54.—**IMPORTS and EXPORTS of CHEESE.**

[Commerce and Navigation Reports; (YB.).]

Year ended June 30—	Imports.	Exports.	Year ended June 30—	Imports.	Exports.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1851	603,398	10,361,189	1913	49,387,994	2,599,058
1860	1,401,161	15,515,799	1914 [2]	63,784,313	2,427,577
1870	2,289,257	57,296,327	1915	50,138,520	55,362,917
1880	2,737,186	127,553,907	1916	30,087,999	44,394,301
1881 [1]	2,655,370	147,995,614	1917	14,481,514	66,050,013
1890	9,263,573	95,376,053	1918	9,839,305	44,330,978
1900	13,455,990	48,419,353	1919	2,442,306	18,794,853
1910	40,817,524	2,846,709	1920	17,913,682	19,378,158
1911	45,568,797	10,366,605	1920 [3]	15,993,725	16,291,319
1912	46,542,007	6,337,559			

[1] Largest exports. [2] Largest imports. [3] Year ended Dec. 31.

TABLE 55.—Highest average daily quotations on AMERICAN CHEDDAR CHEESE in New York State and New York City.

[Producers' Price Current, and New York Produce Review. Bureau of Markets and Crop Estimates.]

Year.	Price per pound.	Year.	Price per pound.	Year.	Price per pound.
	Cents.		*Cents.*		*Cents.*
1851	5.7	1910	16.4	1916	19.0
1860	11.0	1911	14.1	1917	24.4
1870	[1] 19.2	1912	16.4	1918	27.2
1880	13.7	1913	15.4	1919	32.2
1890	9.5	1914	15.6	1920	29.0
1900	11.2	1915	15.5		

[1] Price in gold 16.7 cents.

The quotations for 1851 and 1860 are from market centers outside of New York City. From 1870 on they are from New York City. For 1919 and 1920 from Bureau of Markets and Crop Estimates.

TABLE 56.—Highest average weekly quotations on DOMESTIC SWISS CHEESE (round) on the Chicago market.

[Butter, Cheese and Egg Journal.]

Year.	Price per pound.	Year.	Price per pound.	Year.	Price per pound.
	Cents.		*Cents.*		*Cents.*
1900	12.79	1907	15.35	1914	16.79
1901	13.19	1908	12.09	1915	18.57
1902	13.06	1909	15.48	1916	29.07
1903	12.70	1910	18.87	1917	36.23
1904	11.76	1911	15.04	1918	43.60
1905	11.72	1912	18.66	1919	53.32
1906	12.64	1913	18.51	1920	48.55

TABLE 57.—PRODUCTION and EXPORTATION of OLEOMARGARIN for the United States.

[Bureau of Internal Revenue.]

Year ended Jan. 30.	Production.	Exportation.	Year ended Jan. 30.	Production.	Exportation.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1887	21,513,537	834,574	1914	144,021,276	2,143,702
1890	32,324,032	2,535,926	1915	145,810,048	3,112,528
1900	107,045,028	4,256,067	1916	152,509,913	2,587,689
1905	51,987,336	2,543,433	1917	233,170,111	2,894,266
1910	141,862,280	2,864,770	1918	326,528,839	2,485,779
1911	121,162,795	3,146,094	1919	359,216,571	10,227,702
1912	128,601,053	3,150,282	1920	491,279,512	10,335,445
1913	145,227,862	2,477,659	1921	281,081,514	3,494,683

The table includes colored and uncolored oleomargarin. No imports have been noted in reports.

The Bureau of Internal Revenue is required to keep an accurate account of production and exportation of oleomargarin; however, the exportation figures are generally much lower than the figures reported by the Department of Commerce.

TABLE 58.—Quantity of CHEDDAR CHEESE in STORAGE warehouses on the first of each month.

[Bureau of Markets and Crop Estimates. Thousand pounds—000 omitted.]

Month.	1915	1916	1917	1918	1919	1920	1921
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Jan	.....	28,558	31,855	66,784	19,823	53,168	34,115
Feb	.....	18,908	22,113	56,298	15,486	43,631	25,000
Mar	.....	13,373	15,560	37,743	9,837	34,039	17,477
Apr	.....	8,443	9,842	27,965	6,750	23,431	14,294
May	.....	6,546	7,928	17,736	6,027	16,963	13,466
June	.....	7,301	11,626	20,395	12,478	13,502	17,814
July	.....	16,357	34,159	30,054	37,501	29,654	34,714
Aug	.....	31,569	67,595	48,804	62,645	51,512	40,642
Sept	28,575	46,776	91,545	55,742	76,661	60,372	46,706
Oct	24,144	49,579	90,671	42,065	81,359	55,007	44,842
Nov	32,428	45,713	78,087	33,402	72,889	48,456	42,969
Dec	31,271	37,080	75,166	25,625	62,508	39,921	34,062

NOTE.—Cold storage in connection with cheese in this table means the holding of cheese at a temperature of 45° F. or less for a period of at least 30 days.

Reports began in September, 1915.

TABLE 59.—PRODUCTION and EXPORTATION of FILLED CHEESE.

[Bureau of Internal Revenue.]

Year ended June 30—	Production.	Exportation.	Year ended June 30—	Production.	Exportation.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1897	1,663,067	187,113	1905	.....	.....
1898	1,482,861	18,868	1906	.....	.....
1899	1,688,650	1,688,650	1907	281,429	281,429
1900	1,574,979	1,526,587	1908	127,152	127,152
1901	1,305,459	1,253,268	1909	137,422	137,422
1902[1]	.....	.....	1910	234,158	234,158
1903	571,183	571,183	1911	.....	.....
1904	324,323	324,323	1912[2]	33,031	33,031

[1] No production reported.

[2] None reported after 1912.

A law placing a tax of 1 cent per pound on filled cheese became effective July 1, 1896; however, this kind of cheese had been made for a number of years before that.

TABLE 60.—Average of highest daily QUOTATIONS on RENOVATED BUTTER on the New York market.

[New York Produce Review.]

Year.	Price.	Year.	Price.	Year.	Price.
	Cents.		*Cents.*		*Cents.*
1907	23.65	1912	26.84	1917	38.19
1908	23.09	1913	24.49	1918	43.60
1909	25.21	1914	21.14	1919	52.08
1910	26.61	1915	24.39	1920	51.54
1911	21.66	1916	29.36		

TABLE 61.—PRODUCTION of CONDENSED and EVAPORATED MILK, by years.

Census Bureau and Bureau of Markets and Crop Estimates—c=census m=markets.]

Year.	Number of factories.	Production.	Year.	Number of factories.	Production.
		Pounds.			*Pounds.*
1869c	4	.....	1916m	586	997,835,115
1879c	.....	13,033,267	1917m	596	1,353,605,594
1889c	.....	37,926,821	1918m	491	1,675,477,360
1899c	50	186,921,787	1919m	630	[1] 2,046,879,968
1904c	81	308,485,182	1919c	.....	2,096,973,252
1909c	136	495,197,844	1920m	.....	1,578,015,000
1914c	250	875,507,438			

[1] The amounts reported for 1919 and 1920, by the Bureau of Markets and Crop Estimates, include sterilized milk canned.

TABLE 62.—IMPORTS and EXPORTS of CONDENSED and EVAPORATED MILK.

[Commerce and Navigation Reports (YB).]

Year ended June 30—	Imports.	Exports.	Year ended June 30—	Imports.	Exports.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1892	1,062,250	[1]	1915	33,624,189	37,235,627
1900	472,958	[1]	1916	18,174,505	159,577,620
1910	598,134	13,311,318	1917	18,375,698	259,102,213
1911	630,308	12,180,445	1918	29,926,931	529,750,032
1912	698,176	20,642,738	1919	20,183,723	728,740,509
1913	1,778,043	16,525,918	1920	19,080,642	708,463,187
1914	14,599,339	16,209,082	1920 [2]	23,755,780	411,077,982

[1] Not reported.

[2] Year ended December 31.

TABLE 63.—Production of CONDENSED or EVAPORATED BUTTERMILK, by months, for 1918 and 1919.

[Bureau of Markets and Crop Estimates.]

Month.	1918		1919	
	Factories reporting monthly production.	Quantity made.	Factories reporting monthly production.	Quantity made.
		Pounds.		*Pounds.*
January	17	195,356	11	647,078
February	7	62,777	12	504,308
March	4	101,436	10	524,977
April	6	241,726	12	742,128
May	7	186,146	17	3,348,762
June	7	541,141	18	3,755,273
July	7	562,814	21	3,660,376
August	9	778,009	21	3,031,189
September	12	1,201,400	21	2,424,572
October	8	1,178,646	15	1,401,863
November	13	966,296	15	1,179,880
December	9	518,276	15	1,315,174
Total		6,534,023		22,535,580

Total number of factories in 1918 was 31; total product, 12,040,642 pounds.
Total number of factories in 1919 was 25; total product, 24,282,25 pounds.
Total number of factories in 1920 was 5; total product, 32,539,000 pounds.

TABLE 64.—Production and importation of CASEIN (lactarene).

[Production from Census Bureau and Bureau of Markets and Crop Estimates; imports from Commerce and Navigation Reports—c=census; m=markets.]

Year.	Production.	Imports.[1]	Value of imports.	Import price per pound.
	Pounds.	*Pounds.*		*Cents.*
1899c	12,298,405			
1904c	11,581,874			
1906			$61,004	
1907		1,557,904	92,622	4.4
1908		263,471	13,471	5.0
1909		2,447,332	184,815	7.6
1909c	13,018,298	3,769,476	304,001	8.1
1911		13,011,018	1,109,466	8.5
1912		9,138,338	830,845	9.1
1913		8,805,891	649,371	7.4
1914c	18,570,220	10,798,614	705,264	6.5
1915		7,919,992	498,897	6.3
1916m	8,421,973	10,376,641	984,899	9.4
1917m	8,342,350	12,319,111	1,843,492	14.9
1918m	8,675,504	12,106,855	1,765,653	14.5
1919m	13,924,836	8,125,175	959,995	11.8
1919c				
1920m	11,526,000	24,039,313	2,783,548	11.5

[1] Fiscal year, June 30.

TABLE 65.—PRODUCTION of MILK POWDER, by years.

[Bureau of Markets and Crop Estimates and Census Bureau.]

Year.	Whole-milk powder.	Skim-milk powder.	Total.
	Pounds.	*Pounds.*	*Pounds.*
1914	.....	.....	20,987,911
1916	2,123,251	16,463,362	18,586,613
1917	3,138,809	22,624,357	25,763,166
1918	4,154,334	25,432,341	30,250,701
1919	8,660,785	33,076,131	42,328,086
1919[1]	.....	.....	106,711,288
1920	10,334,000	41,893,000	52,227,000

[1] From the census reports, all kinds

TABLE 66.—Production of BUTTERMILK POWDER and MALTED MILK, by years.

[Bureau of Markets and Crop Estimates.]

Year.	Buttermilk powder.	Malted milk.
	Pounds.	*Pounds.*
1916	342,485	11,654,384
1917	2,557,228	13,851,939
1918	4,341,157	15,622,876
1919	5,278,827	17,435,887
1920	5,585,906	19,715,000

TABLE 67.—Production and importation of MILK SUGAR (lactose).

[Production from Census Bureau and Bureau of Markets and Crop Estimates, imports from Commerce and Navigation Reports—c=census; m=markets.]

Year.	Production.[1]	Imports.[2]	Year.	Production.[1]	Imports.[2]
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1906	.....	4,709	1916m	1,844,228	22,400
1910	.....	4,960	1917m	2,155,076	None.
1911	.....	4,732	1918m	3,219,461	None.
1912	.....	2,697	1919m	6,615,874	None.
1913	.....	9,026	1919c	.....	.....
1914c	4,051,320	578,727	1920m	5,583,000	None.
1915	.....	250,212			

[1] Calendar year.
[2] Fiscal year ended June 30.

TABLE 68.—Estimated quantity of ICE CREAM produced in the United States, by years.

Year.	Total production.[1]	Total production.[2]	Year.	Total production.[1]	Total production.[2]
	Gallons.	*Gallons.*		*Gallons.*	*Gallons.*
1909	80,000,000	.....	1916	208,320,000	.....
1910	95,450,000	.....	1917	219,385,000	210,000,000
1911	138,000,000	.....	1918	231,053,000	220,000,000
1912	160,000,000	.....	1919	248,381,975	230,000,000
1913	172,380,000	.....	1920	251,820,490	260,000,000
1914	163,761,000	.....	1821	216,569,212	.....
1915	175,224,270	.....			

[1] From the International Confectioner.
[2] From Dairy Division, Bureau of Animal Industry, and Bureau of Markets and Crop Estimates.

TABLE 69.—Production of ICE CREAM of all kinds, by months, for the year 1920, for 2,427 factories.

[Bureau of Markets and Crop Estimates.]

Month.	Quantity made.[1]	Month.	Quantity made.[1]
	Gallons.		*Gallons.*
January	4,455,588	August	20,765,524
February	4,986,374	September	15,222,342
March	7,323,202	October	9,635,394
April	9,296,571	November	5,279,143
May	15,112,932	December	4,681,157
June	20,695,601		
July	23,479,313	Total	140,933,141

[1] The reported production of ice cream is considered to be about 50 per cent of the total production.

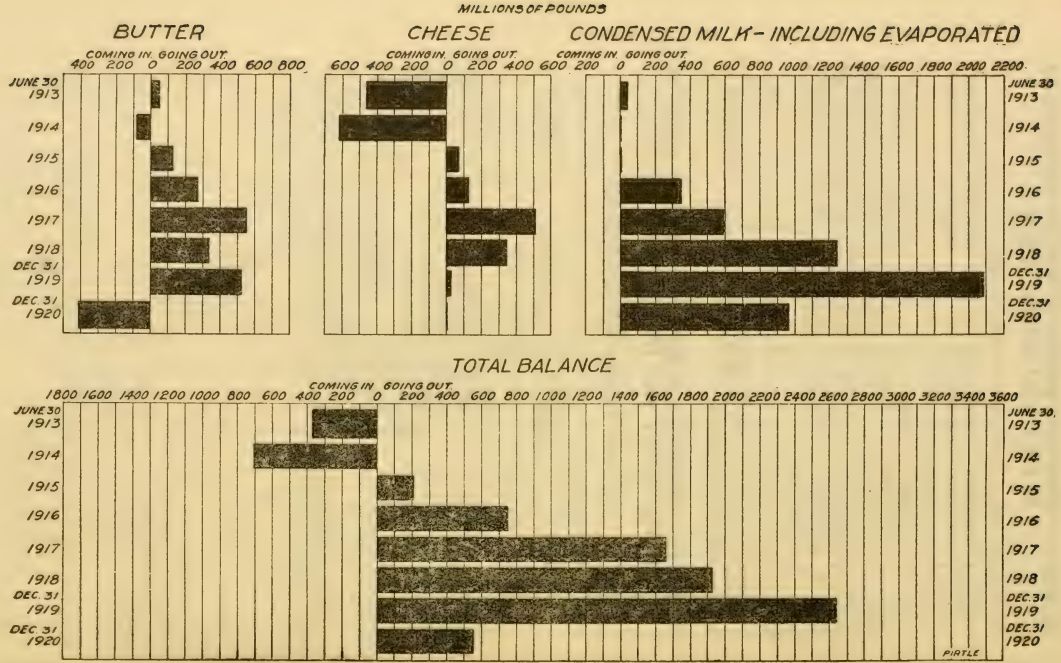

FIG. 1.—Balance of trade in dairy products, in terms of whole milk.

TABLE 70.—Balance of BUTTER, CHEESE, and CONDENSED MILK, taken separately.

[From Department of Commerce reports.]

[Expressed in terms of whole milk.]

Year ended June 30—	Butter.		Cheese.		Condensed milk.[1]	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Lbs.*	*Pounds.*
1913	.....	50,556,807	458,508,440	.....	.....	36,869,685
1914	85,890,653	.....	620,698,920	.....	.....	3,144,991
1915	.....	129,251,262	.....	72,657,890	.....	9,305,595
1916	.....	268,428,678	.....	129,737,640	.....	353,510,485
1917	.....	552,536,964	.....	513,641,470	.....	599,364,492
1918	.....	334,530,861	.....	344,916,730	.....	1,249,557,753
1919[2]	.....	525,779,457	.....	28,275,170	.....	2,089,180,437
1920[2]	419,295,177	.....	.....	2,975,940	.....	968,305,505

[1] Condensed milk includes condensed cream, condensed skim milk, and evaporated milk. The figures for 1920 are preliminary and subject to slight change.

[2] Year ended Dec. 31.

TABLE 71.—Total balance of BUTTER, CHEESE, and CONDENSED MILK, combined.

[From Department of Commerce reports.]

[In terms of whole milk.]

Year ended June 30—	Net imports.	Net exports.
	Pounds.	*Pounds.*
1913	371,081,948	.....
1914	703,444,633	.....
1915	.....	211,214,747
1916	.....	751,878,803
1917	.....	1,665,542,926
1918	.....	1,929,005,344
1919, year ended Dec. 31	.....	2,643,235,064
1920, year ended Dec. 31	.....	551,986,268

EXPLANATION OF FIGURE 1.[1]

This chart was plotted from the difference of imports and exports, and includes butter, cheese, and condensed milk. The chart expresses these differences in terms of milk, assuming that—

1 pound of butter equals..... 21 pounds of milk.
1 pound of cheese equals..... 10 pounds of milk.
1 pound of condensed milk equals... 2½ pounds of milk.

[1] For detailed figures see Tables 70 and 71.

FOREIGN COUNTRIES.

TABLE 72.—Pan American countries—IMPORTS and EXPORTS of BUTTER.

[Commerce and Navigation Reports.]

Country.	Year.	Imports.	Exports.
		Pounds.	*Pounds.*
Argentina	1919	.....	39,609,970
Bolivia	1913	114,690	.....
Brazil	1919	42,421	.....
British Guiana	1913	495,614	.....
Chile	1915	314,144	2,844
Colombia [1]	1916	36,909	.....
Costa Rica	1915	24,486	.....
Cuba	1917	1,701,254	.....
Ecuador [1]	1916	975	.....
Guatemala [1]	1916	16,883	.....
Haiti [1]	1916	426,200	.....
Honduras [1]	1916	101,516	.....
Mexico [1]	1916	667,149	.....
Nicaragua [1]	1916	55,756	.....
Panama [1]	1916	621,527	.....
Paraguay	1915	9,996	.....
Peru [1]	1916	50,936	.....
Santo Domingo [1]	1916	56,264	.....
Salvador [1]	1916	5,533	.....
Uruguay	1911	13,440	.....
Venezuela	1915	568,762	220

[1] United States trade only.

TABLE 73.—Pan American countries—IMPORTS and EXPORTS of CHEESE.

[Commerce and Navigation Reports.]

Country.	Year.	Imports.	Exports.
		Pounds.	*Pounds.*
Argentina	1919	.....	19,561,416
Bolivia	1915	27,291	.....
Brazil	1919	210,453	.....
British Guiana		.....	.....
Chile	1915	419,767	440
Colombia [1]	1916	15,748	.....
Costa Rica	1915	52,672	.....
Cuba	1918	3,318,303	5,137
Ecuador [1]	1916	1,016	.....
Guatemala [1]	1916	27,122	.....
Haiti [1]	1916	52,590	.....
Honduras [1]	1916	60,394	.....
Mexico	1913	1,870,385	.....
Mexico [1]	1916	168,389	.....
Nicaragua [1]	1916	27,460	.....
Panama [1]	1916	445,237	.....
Paraguay	1915	47,520	.....
Peru [1]	1916	5,754	.....
Santo Domingo [1]	1916	87,525	.....
Salvador [1]	1916	5,256	.....
Uruguay	1911	587,216	(1914) 28,250
Venezuela	1915	102,051	4,010

[1] United States trade only.

TABLE 74.—Pan American countries—Imports of CONDENSED MILK.

[Commerce and Navigation Reports.]

Country.	Year.	Imports.	Country.	Year.	Imports.
		Pounds.			*Pounds.*
Argentina	1919	.....	Honduras [1]	1916	186,596
Bolivia	1914	882,413	Mexico [1]	1916	1,499,279
Brazil	1914	7,461,967	Nicaragua [1]	1916	106,756
British Guiana	1913	.....	Panama [1]	1916	4,071,203
Chile	1915	1,573,930	Paraguay	1915	.....
Colombia [1]	1916	111,841	Peru [1]	1916	964,139
Costa Rica	1915	245,579	Santo Domingo [1]	1916	71,945
Cuba	1917	36,497,528	Salvador [1]	1916	6,720
Ecuador [1]	1916	27,493	Uruguay	1911	21,504
Guatemala [1]	1916	86,534	Venezuela	1915	23,911
Haiti [1]	1916	19,726			

[1] United States trade only, for fiscal year ended June 30.

TABLE 75.—Argentina—Number of DAIRY COWS and TOTAL CATTLE.

[Comision del Censo Agropecurio, Estadistica Agricola, and Argentine Yearbook, (YB.). c=census. e=estimates.] [1]

Year.	Dairy cows.	Totalcattle.	Year.	Dairy cows.	Total cattle.
1888c	.....	21,963,930	1915e	2,291,000	26,387,000
1895c	1,800,799	21,701,526	1916e	2,319,000	26,717,000
1908c	2,163,900	29,116,625	1917e	2,349,000	27,052,000
1914c	2,246,000	25,866,763	1918e	2,378,000	27,392,000

[1] Estimates by Argentine Department of Agriculture.

TABLE 76.—Argentina—Number of CATTLE, by classes.

[Report of Third Census, 1914.]

Kinds.	Milk cows.	Cows for breeding.	Bulls.	Calves and young stock.	Steers and oxen.	Total cattle.
Purebred	29,287	218,833	61,846	97,367	.....	407,333
Mixed breed	1,263,738	7,785,591	307,669	6,734,650	233,044	16,324,692
Criollos(native)	953,090	3,830,096	308,661	3,536,736	506,155	9,134,738
Total	2,246,115	11,834,520	678,176	10,368,753	739,199	25,866,763

TABLE 77.—Argentina—Production and consumption of BUTTER and CHEESE in factories.

[Estadistica Agricola.]

Year.	Butter production.	Per capita consumption.	Cheese production.	Per capita consumption.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1903	19,477,924	1.53	2,619,086	1.01
1904				
1905	19,475,371	1.35	4,299,897	1.51
1906	17,733,305	1.34	3,073,887	1.74
1907	14,832,672	1.31	4,124,411	1.83
1908	15,978,170	1.25	4,135,770	1.88
1909	15,766,680	1.02	6,799,630	2.30
1910	16,617,131	1.43	6,044,878	2.17
1911	17,427,498	1.92	7,745,993	2.49
1912	20,849,689	1.64	11,962,256	3.07
1913	22,482,506	1.77	12,542,898	2.95
1914	20,518,984	1.57	11,933,500	2.50
1915	22,367,645	1.47	14,938,370	2.68
1916	24,826,000	1.48	19,195,452	2.63
1917	33,404,099	1.41	35,050,935	3.58
1918	53,924,516	1.44	45,009,114	3.72
1919	[1] 56,722,973	1.42	[1] 49,893,528	3.67

[1] Preliminary figures.

TABLE 78.—Argentina—Imports and exports of BUTTER and CHEESE.

[Argentine Yearbook, Estadistica Agricola.]

Year.	Butter.		Cheese.	
	Imports.	Exports.	Imports.	Exports.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1870	103,001		1,263,317	
1880	240,777	8,721	1,252,457	3,104
1890			2,620,504	
1900			3,028,728	1,887
1910	1,375	6,341,589	9,536,041	809
1911	150,175	3,077,652	10,845,500	1,142
1912		8,105,747	11,848,927	4,281
1913		8,342,340	11,122,295	16,186
1914		7,676,417	8,453,245	7,771
1915	798	10,191,866	7,305,954	13,344
1916	705	12,502,286	3,133,279	502,648
1917	805	21,671,558	689,356	6,014,148
1918	249	41,821,262	81,894	14,177,253
1919	9,921	44,863,610	209,243	19,561,969
1920		[1] 41,249,486		[1] 13,860,915

[1] Special report to Bureau of Markets and Crop Estimates.

TABLE 79—Australia—Production of DAIRY PRODUCTS.

[Yearbook and Bulletin of Production.]

Year.	Total milk produced.	Butter.		
		Factory.	Farm.	Total.
	Gallons.	*Pounds.*	*Pounds.*	*Pounds.*
1901	.....	.....	.....	101,671,066
1902	.....	.....	.....	.....
1903	.....	.....	.....	100,332,242
1904	.....	.....	.....	140,255,208
1905	.....	.....	.....	140,898,726
1906	.....	.....	.....	159,934,617
1907	475,860,552	.....	.....	156,380,670
1908	447,509,376	129,157,191	16,160,166	145,317,357
1909	481,092,361	136,007,354	18,265,898	154,273,252
1910	572,998,277	174,227,684	18,984,225	193,211,909
1911	594,726,964	195,228,256	16,345,489	211,573,745
1912	555,524,508	171,042,044	16,152,117	187,194,161
1913	583,785,215	181,386,305	17,371,933	198,758,238
1914	571,150,263	178,778,836	15,191,576	193,970,412
1915	434,767,460	121,664,559	16,007,754	137,672,313
1916	549,684,701	165,038,927	17,431,851	182,470,778
1917	607,362,725	183,301,056	17,195,958	200,497,014
1918	558,369,526	165,241,772	16,560,903	181,802,675
1919	.....	.....	.....	165,468,791

Year.	Cheese.			Condensed and powdered milk produced.
	Factory.	Farm.	Total.	
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1901	.....	.....	11,575,692	.....
1902	.....	.....	.....	.....
1903	.....	.....	13,423,674	.....
1904	.....	.....	12,635,257	.....
1905	.....	.....	13,155,030	.....
1906	.....	.....	14,847,958	.....
1907	.....	.....	13,383,563	7,949,022
1908	11,120,147	3,639,641	14,759,788	9,643,551
1909	11,855,754	3,919,083	15,774,837	12,926,201
1910	12,060,474	4,476,537	16,537,011	12,491,261
1911	12,167,732	3,718,979	15,886,712	22,983,707
1912	11,946,221	4,214,270	16,160,491	30,059,911
1913	14,219,305	5,524,110	19,743,415	32,684,483
1914	16,666,773	4,573,638	21,240,411	32,052,694
1915	12,108,959	3,720,267	15,829,226	26,977,000
1916	21,207,961	4,200,911	25,408,872	45,694,897
1917	23,907,143	3,523,662	27,430,805	56,188,045
1918	20,995,399	2,794,841	23,790,240	63,289,645
1919	.....	.....	26,196,292	.....

TABLE 80.—Australia—Number of DAIRY COWS and TOTAL CATTLE.

[Statistical account by T. A. Coughlin. Also An. Rep., U. S. Bureau of Animal Industry, 1900 (YB.)].

Year.	Dairy cows.	Total cattle.	Year.	Dairy cows.	Total cattle.
1788	.....	(1) 6	1911	2,120,469	11,828,954
1792	.....	23	1912	2,056,143	11,577,259
1800	.....	1,044	1913	2,035,717	11,483,882
1851	.....	1,921,963	1914	1,938,834	11,047,677
1861	.....	4,039,839	1915	1,684,393	9,931,416
1871	.....	4,713,820	1916	1,747,351	10,467,737
1881	.....	8,709,628	1917	1,904,906	11,956,024
1891	.....	11,112,112	1918	1,902,036	12,738,852
1900	[2]1,143,276	8,640,225	1919	.....	12,888,617
1910	2,064,599	11,744,714	1920	.....	.....

[1] The first importation of cattle was in 1788 and consisted of six head.
[2] 1899.

TABLE 81.—Australia—Exports of DAIRY PRODUCTS.

[Trade Customs and Excise Revenue.]

Year.	Butter.	Cheese.	Condensed milk.	Milk powder.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1899	2,363,088	None.	None.	None.
1890	2,976,848	None.	None.	None.
1899	13,608,224	None.	None.	None.
1901	34,536,277	293,381	None.	None.
1905	55,904,151	193,608	None.	None.
1910	87,894,943	911,760	266,904	None.
1911	101,722,136	1,149,134	870,112	146,960
1912	66,679,120	146,022	812,520	833,894
1913	75,795,642	1,602,609	1,516,160	1,263,803
1914	.....	.....	.....	.....
1915[1]	54,021,523	2,542,478	4,765,619	141,777
1916	16,722,010	128,229	544,713	163,930
1917	75,840,568	10,569,279	15,236,950	None.
1918	72,277,526	8,426,647	25,181,569	404,823
1919	41,114,764	2,303,276	27,272,055	662,943
1920	92,420,800	.....	.....	.....

[1] Calendar year from 1899 to 1913, inclusive; then changed to fiscal year ended June 30. No figures for the year 1914.

TABLE 82.—Austria—Number of COWS and TOTAL CATTLE.

[Various authorities; (YB.).]

Year.	Cows.	Total cattle.	Year.	Cows.	Total cattle.
1869	3,831,136	7,425,212	1900	4,749,152	9,511,170
1880	4,138,625	8,584,077	1910	4,901,886	9,160,009
1890	4,254,303	8,643,936			

TABLE 83.—Canada—Number of DAIRY COWS and TOTAL CATTLE.

[The Dairy Industry of Canada; and Monthly Bulletin of Agricultural Statistics.]

Year.[1]	Dairy cows.	Total cattle (YB.).	Year.[1]	Dairy cows.	Total cattle (YB.).
1871[2]	1,251,209	2,624,290	1914	2,673,286	6,036,817
1881	1,595,800	3,514,989	1915	2,666,846	6,066,001
1891	1,857,112	4,120,586	1916	2,833,433	6,594,151
1901	2,408,677	5,327,504	1917	3,202,283	7,920,940
1910	2,853,957	7,104,893	1918	3,538,600	10,045,867
1911	2,594,179	6,533,436	1919	3,548,437	10,085,011
1912	2,604,488	6,431,861	1920	3,530,238	9,477,380
1913	2,740,434	6,656,121	1921	3,736,832	10,206,205

[1] On June 15.
[2] Data for 1871 included only Ontario, Quebec, New Brunswick, and Nova Scotia.

TABLE 84.—Canada—Production of BUTTER and CHEESE.

[Dairy and Cold Storage Commissioner's Reports, and Yearbooks.]

Year.	Farm.		Factory.	
	Butter.	Cheese.	Butter.	Cheese.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1871	74,190,584	4,984,843	.....	.....
1881	102,545,169	3,184,996	.....	.....
1891	111,577,210	6,267,203	.....	.....
1901	105,343,076	.....	36,066,739	220,833,269
1911	137,110,200	1,371,092	64,698,165	199,904,205
1915	.....	.....	83,991,453	183,887,837
1916	.....	.....	82,564,130	192,968,597
1917	.....	.....	87,526,939	194,904,336
1918	.....	.....	93,266,876	174,881,957
1919	[1] 125,000,000	.....	101,554,131	167,734,982
1920	[1] 125,000,000	.....	111,691,718	149,201,856

Year.	Total.	
	Butter.	Cheese.
	Pounds.	*Pounds.*
1871	74,190,584	23,000,000
1881	.....	61,000,000
1891	.....	109,000,000
1901	141,409,815	.....
1911	201,808,365	201,275,297
1915	.....	.....
1916	.....	.....
1917	.....	.....
1918	.....	.....
1919	226,554,131	167,734,982
1920	236,691,718	149,201,856

[1] Farm butter estimated by Canadian officials.

TABLE 85.—Canada—Imports and exports of BUTTER and CHEESE.

[Trade and Commerce Reports and Bulletin Commercial Series No. 1.]

Fiscal year.	Butter.		Cheese.	
	Imports.	Exports.	Imports.	Exports.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1870 [1]	83,728	12,260,887	59,744	5,8277,82
1880	126,848	18,535,362	106,815	40,368,678
1890	381,329	1,951,585	127,556	94,260,187
1900	1,175,301	25,259,737	301,098	185,984,430
1910 [2]	393,582	4,615,380	683,778	180,859,886
1911	1,227,390	3,142,682	866,653	181,893,724
1912	3,874,587	8,844,402	919,189	163,450,684
1913	7,989,269	828,323	1,495,758	155,216,392
1914	7,317,259	1,228,753	1,512,108	144,478,340
1915	6,822,540	2,724,913	1,162,465	137,601,661
1916	4,309,831	3,441,183	971,821	168,961,583
1917	997,335	7,990,435	785,221	180,733,426
1918	434,049	4,926,154	343,269	169,530,753
1919	1,934,062	13,659,157	172,943	152,207,037
1920	397,955	17,612,605	362,693	126,395,777
1921	3,741,628	9,739,414	551,040	133,620,340

[1] 1870 to 1900, year ended June 30.
[2] 1910 to 1920, year ended Mar. 31.

TABLE 86.—Canada—Exports of CREAM, CASEIN, and CONDENSED and EVAPORATED MILK.

[Trade and Commerce Reports, and Bulletin Commercial Series No. 1.]

Fiscal year.	Cream.	Casein.	Condensed and evaporated milk.
	Gallons.	*Pounds.*	*Pounds.*
1911	1,823,821	1,515,172	6,584,828
1912	886,266	1,021,197	4,389,350
1913	820,360	349,865	335,849
1914	1,323,929	270,486	9,339,382
1915	1,895,575	230,045	18,355,975
1916	1,262,280	50,564	13,247,834
1917	803,498	50,588	15,858,622
1918	585,601	16,200	43,656,718
1919	485,015	9,110	50,786,856
1920	795,780	.....	54,247,498
1921	1,279,195	.....	49,147,541

Year ended Mar 31.

TABLE 87.—Canada—Production of CONDENSED and POWDERED MILK.

[Canadian News Letter, and Dairy and Cold Storage Commissioner's Reports.]

Year.	Condensed milk.	Milk powder.	Year.	Condensed milk.	Milk powder.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1910	27,831,596	5,323,537	1919	85,961,610	6,591,099
1917	61,520,811	3,979,514	1920	92,104,562	7,574,668
1918	79,807,971	5,530,915			

TABLE 88.—Denmark—Number of DAIRY COWS and TOTAL CATTLE.

[Department of Statistics of Denmark, Statistisk Aarbog, and Statistik Arsbok.]

Year.	Dairy cows.	Total cattle (YB.).	Year.	Dairy cows.	Total cattle (YB.).
1876	898,012	1,348,321	1916 [3]	1,141,246	2,289,996
1881	898,790	.....	1917 [4]	1,147,183	2,458,158
1893	1,011,098	1,696,190	1918 [5]	1,024,417	2,123,722
1903 [1]	1,089,073	1,840,466	1919 [5]	1,042,143	2,188,142
1909 [1]	1,281,974	2,253,982	1920 [5]	1,195,733	2,286,408
1914 [1]	1,310,268	2,462,862	1921 [5]	1,184,268	2,591,000
1915 [2]	1,281,132	2,416,471			

[1] Number on July 15.
[2] Number on May 15.
[3] Number on Feb. 20.
[4] Number on July 1.
[5] Number on July 15, including South Jutland.

TABLE 89.—Denmark—Imports and exports of BUTTER.

[Denmarks Vareindforsel og udforsel; Statistisk Tabelvaerk. (YB.)].

Year.	Butter.		Year.	Butter.	
	Imports.	Exports.		Imports.	Exports.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1866	Not given.	10,710,194	1914	3,054,473	210,084,491
1870	.....	13,804,782	1915	686,733	223,964,432
1880	.....	27,057,726	1916	190,698	211,090,450
1890	[1] 20,549,573	98,167,019	1917	882	135,501,550
1900	[1] 46,700,515	131,100,071	1918	220	32,305,547
1910	6,240,561	195,052,426	1919	.....	80,908,820
1911	6,026,935	197,481,675	1920	.....	[2] 165,345,000
1912	5,966,000	187,755,000	1921	.....	[2] 199,584,863
1913	6,242,104	200,670,408			

[1] Imports for 1890 and 1900 were "general." From 1910 the imports were for "special trade only."
[2] Semiofficial, preliminary.

TABLE 90.—Denmark—Average of the official weekly quotations on BUTTER.

[Smør Tidende.]

Year.	Price per pound.[1]	Year.	Price per pound.[1]	Year.	Price per pound.[1]
	Cents.		*Cents.*		*Cents.*
1851	10.72	1910	26.26	1916	41.10
1860	13.67	1911	30.55	1917	62.20
1870	19.83	1912	29.48	1918	59.10
1880	24.12	1913	29.75	1919	74.00
1890	24.39	1914	32.16	1920	78.85
1900	26.80	1915	36.70	1921	57.25

[1] Conversion made at the rate of 1 krone equals 26.8 cents.

TABLE 91.—Finland—Number of COWS, TOTAL CATTLE, and REINDEER.

[Statistisk Arsbok.]

Year.	Cows.	Total cattle (YB.).	Reindeer.[3]	Year.	Cows.	Total cattle (YB.).	Reindeer.[3]
1865	670,897	954,321	.....	1912	1,151,659	.....	.....
1870	687,060	997,960	.....	1913	1,141,757	.....	.....
1880	795,575	1,132,002	.....	1914	1,164,229	1,603,720	.....
1890	928,276	1,305,187	.....	1915[2]	1,114,447	1,537,936	.....
1900	1,072,002	1,427,560	.....	1916	1,080,558	1,501,975	.....
1910[1]	1,142,908	1,573,163	.....	1917	1,075,749	1,500,670	.....
1911	1,150,500	.....	.....	1918	1,015,901	1,438,573	.....

[1] The figures for 1910 are for month of September.
[2] Data for 1915 to 1918 are directly from the Finnish Government.
[3] The number of reindeer since 1895 has averaged about 125,000 head.

TABLE 92.—France—Number of COWS, TOTAL CATTLE, SHEEP, and GOATS.

[Statistique Agricole Annuelle, and Annuaire Statistique; also Enquête sur l'Industrie de Lait, 1902; (YB.).]

Year	Cows.	Total cattle.	Sheep.	Goats.
1840	5,501,825	11,761,538	14,804,946	964,300
1852	5,781,465	11,970,737	.....	.....
1862	6,408,261	12,811,589	14,572,430	1,216,774
1882	6,587,639	12,997,054	9,758,528	2,336,332
1890	6,509,325	13,662,585	.....	.....
1892	6,673,460	13,708,997	8,804,401	1,335,736
1900	7,819,582	14,520,832	20,180,000	1,558,000
1910	7,596,250	14,532,030	17,111,000	1,418,000
1911	7,606,670	14,435,530	16,425,000	1,424,000
1912	7,745,750	14,705,900	16,468,000	1,409,000
1913	7,794,270	14,787,410	16,213,000	1,453,000
1914[1]	6,663,355	12,668,000	14,038,000	1,317,000
1915[1]	6,266,035	12,514,414	13,483,189	1,230,000
1916[1]	6,221,850	12,342,000	12,379,000	1,177,000
1917[1]	6,177,940	12,241,980	10,587,000	.....
1918[1]	6,237,470	12,250,820	9,496,000	1,197,000
1919	6,327,510	12,373,660	8,991,000	1,167,000
1920	6,544,460	12,755,720	9,376,630	.....

[1] Not including the invaded portion.

TABLE 93.—France—IMPORTS of BUTTER, CHEESE, and CONDENSED MILK.

[Tableau Général du Commerce de la France; (YB.).]

Year.	Butter.	Cheese.	Condensed milk.
	Pounds.	*Pounds.*	*Pounds.*
1850	3,493,996	9,568,652	.....
1860	3,926,503	11,493,484	.....
1870	6,635,326	23,756,057	.....
1880	15,641,716	34,811,710	8,718,364
1890	14,164,738	28,725,722	608,170
1900	13,559,262	42,635,400	1,070,571
1910	10,656,375	49,011,340	1,631,624
1911	19,939,064	49,423,380	2,724,004
1912	14,179,326	55,494,410	3,205,047
1913	13,033,816	52,085,000	3,283,972
1914	13,654,631	45,521,242	15,535,375
1915	1,710,549	46,743,913	8,524,900
1916	625,004	24,139,268	21,894,764
1917	742,288	12,046,816	87,652,691
1918	1,983,693	11,206,202	33,404,320
1919	12,752,288	15,233,243	103,496,490
1920	4,812,000	15,130,000	.....

TABLE 94.—France—EXPORTS of BUTTER, CHEESE, and CONDENSED MILK.

[Tableau Général du Commerce de la France; (YB.).]

Year.	Butter.	Cheese.	Condensed milk.
	Pounds.	*Pounds.*	*Pounds.*
1850	4,870,497	1,866,048	.....
1860	26,073,317	3,458,969	.....
1870	42,300,974	4,676,261	.....
1880	68,484,843	9,407,683	.....
1890	89,784,546	12,232,137	167,772
1900	44,658,761	18,467,555	1,594,510
1910	48,427,787	25,160,659	4,251,351
1911	28,221,305	24,041,383	3,134,280
1912	37,571,675	27,689,555	4,136,932
1913	38,359,820	37,386,709	5,379,224
1914	44,619,000	22,323,780	4,315,063
1915	50,336,088	16,241,729	6,370,192
1916	18,936,632	11,704,221	2,205,702
1917	6,728,439	7,403,488	932,105
1918	2,619,506	5,212,556	726,636
1919	1,119,055	7,336,027	2,121,487
1920	4,812,000	15,130,000	.....

TABLE 95.—Germany—Number of COWS, TOTAL CATTLE, and GOATS.

[Statistisches Jahrbuch, and Imperial Gazette.]

Year.	Cows.	Total cattle (YB.).	Goats (YB.).
1883	9,087,293	15,786,764	.....
1892	9,946,255	17,555,834	3,091,508
1900	10,458,631	18,939,692	3,266,997
1907	10,966,998	20,630,544	3,330,000
1912	10,944,283	20,182,021	3,410,396
1913	11,320,460	20,994,344	3,548,384
1914	11,316,457	21,817,375	3,538,414
1915	10,970,009	20,316,948	3,438,296
1916[1]	.....	20,338,950	.....
1917	.....	19,649,575	.....
1918	.....	17,226,855	.....
1919[1]	7,796,931	16,317,329	4,564,210
1920	8,865,632	16,789,844	.....
1921	8,222,753	16,839,559	.....

[1] September.

TABLE 96.—Germany—Per capita BUTTER and CHEESE CONSUMPTION.

Year.	Butter consumption.	Cheese consumption.
	Pounds.	*Pounds.*
1912	.....	9.5
1913	14.7	.....
1918	9.2	.....

TABLE 97.—Germany—YIELD of MILK and PRODUCTION of DAIRY PRODUCTS.

[Food conditions in Germany, E. H. Starling, 1919.]

Year.	Average milk yield.	Total milk yield.	Butter produced.	Cheese produced.
	Gallons.	*Gallons.*	*Pounds.*	*Pounds.*
1909–1913[1]	580	6,174,025,000	881,840,000	590,832,800
1916	495	4,290,000,000	.....	.....
1917	412	3,657,500,000	.....	.....
1918	357	3,135,000,000	529,104,000	.....

[1] Average.

TABLE 98.—Germany—IMPORTS of DAIRY PRODUCTS.

[Auswärtiger Handel Deutschland and Bul. 103, Bureau of Statistics; (YB.).]

Year.	Butter.	Cheese.	Condensed milk.	Whole milk.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1897	19,936,946	Not found.	3,086	20,743,700
1900	34,647,494	36,689,123	3,748	[1] 33,154,098
1910	92,815,865	46,011,104	59,083	82,054,110
1911	123,619,418	45,954,448	52,910	92,154,264
1912	122,472,143	47,276,765	.....	.....
1913	119,576,189	57,902,937	3,086	5,602,550
1914	.....	.....	882	5,515,468
1920[2]	17,236,965	50,343,584	9,180,395	.....

[1] Including cream. [2] Preliminary.

TABLE 99.—Germany—EXPORTS of DAIRY PRODUCTS.

[Auswärtiger Handel Deutschland and Bul. 103, Bureau of Statistics; (YB.).]

Year.	Butter.	Cheese.	Condensed milk.	Whole milk.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1897	7,915,396	Not found.	6,239,018	11,890,951
1900	5,565,072	2,562,627	6,104,537	17,254,522
1910	398,592	1,858,257	10,131,901	15,744,592
1911	554,898	2,178,806	10,401,964	19,113,882
1912	482,000	1,812,000	.....	.....
1913	602,000	1,603,000	1,471,791	2,273,384
1914	.....	.....	1,701,951	2,228,189
1920[1]	524,695	172,841	524,695	.....

[1] Preliminary.

TABLE 100.—Hungary—Number of COWS and TOTAL CATTLE.

[Various authorities; (YB.).]

Year.	Cows.	Total cattle.	Year.	Cows.	Total cattle.
1870	2,052,488	5,279,193	1904	.....	7,319,121
1880	2,035,217	5,311,378	1909	2,500,000	7,152,568
1895	2,185,224	6,738,365	1913	.....	[1] 6,045,000

[1] And 162,000 buffaloes.

TABLE 101.—India—Number of CATTLE and BUFFALOES.

[Yearbook, U. S. Department of Agriculture.]

Year.	British India.		Year.	Native States.	
	Cattle.	Buffaloes.		Cattle.	Buffaloes.
1894–5	67,045,000	11,826,000	1900–1	7,397,000	1,228,000
1899–1900	72,666,000	12,120,000	1904–5	8,178,000	1,347,000
1904–5	77,111,000	12,871,000	1909–10	10,391,000	1,559,000
1910–11	94,664,000	16,628,000	1913–14	12,236,000	1,765,000
1913–14	125,042,000	18,235,000	1916–17	12,999,000	1,802,000
1914–15	128,310,000	19,025,000	1917–18	12,691,000	1,863,000
1915–16	129,742,000	19,206,000			
1916–17	130,087,000	19,266,000			
1917–18	129,876,000	19,235,000			

Young buffaloes are included under cattle and not under buffaloes. The heading "Buffaloes" means adult animals.

Figures for the Native States are reported as "not complete."

TABLE 102.—Italy—Number of CATTLE, BUFFALOES, SHEEP, and GOATS.

[Annuario Statistico Italiano, Census Reports, and L'Italia Agricola; (YB.).]

Year.	Cattle.	Buffaloes.	Sheep.	Goats.
1881 [1] [4]	4,772,000	11,000	8,596,000	2,016,000
1905 [4]	5,672,000	.....	.....	.....
1908 [2]	6,198,861	19,366	11,162,926	2,714,878
1914	6,646,000		13,824,000	
1918 [3]	6,239,741	24,026	11,753,910	3,082,558

[1] Census taken in 1881 was as of Feb. 13.
[2] Census taken in 1908 was as of Mar. 10.
[3] Census taken in 1918 was as of April.
[4] Prior to the census of 1908 the data were taken by sending schedules out to be filled in by the farmers.

TABLE 103.—Italy—IMPORTS and EXPORTS of DAIRY PRODUCTS.

[Movimento Commerciale, Italy; (YB.).]

Year.	Butter.		Cheese.		Condensed milk.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
1871..	287,700	2,213,198	12,553,433	3,887,151	.....	.....
1880..	509,273	5,183,896	16,512,454	5,368,862	.....	.....
1890..	705,913	6,709,921	17,059,195	12,559,386	.....	.....
1900..	429,236	14,136,777	9,352,134	26,051,097	.....	.....
1910..	345,020	8,295,469	14,760,900	57,515,814	574,960	6,615,123
1911..	2,516,771	8,147,320	11,915,422	61,402,526	834,882	6,629,012
1912..	899,256	8,842,650	10,068,629	67,504,856	954,592	7,183,689
1913..	909,838	6,034,211	12,354,799	72,320,580	1,214,955	5,728,653
1914..	194,005	9,310,026	9,837,807	66,003,526	1,111,559	9,998,522
1915..	96,561	7,488,365	3,471,584	65,761,027	1,335,106	11,575,032
1916..	135,803	792,113	252,206	39,322,568	959,001	6,906,791
1917..	126,324	171,518	9,259	4,336,669	2,064,828	646,389
1918..	73,193	108,687	746,037	938,278	7,210,144	157,408
1919..	1,880,087	50,926	11,151,308	1,821,441	27,383,341	279,543
1920..	3,103,856	95,680	5,893,337	2,789,921	1,632,727	404,985

TABLE 104.—Japan—Number of COWS, TOTAL CATTLE, and MILK COWS.

[Japanese Yearbook.]

Year.	Native cows.	Grade cows.	Foreign breeds of cows.	Total cattle.	Milk cows.	Average yield.
						Pounds.
1899..	685,106	70,002	14,055	1,252,865	.....	.....
1900..	676,600	82,715	15,343	1,261,214	.....	.....
1905..	560,295	171,278	15,943	1,167,610	.....	.....
1910..	569,441	322,857	18,404	1,384,183	41,333	2,581
1911..	567,973	338,278	21,345	1,405,026	44,060	2,515
1912..	560,564	340,193	20,870	1,399,498	41,943	2,732
1913..	565,324	331,919	20,815	1,388,708	42,281	2,705
1914..	580,907	321,137	14,625	1,387,233	43,374	2,722
1915..	605,244	307,969	12,739	1,387,922	43,645	2,861
1916..	590,084	301,170	12,191	1,342,990	44,791	2,871
1917..	580,770	295,626	12,690	1,304,331	45,739	3,091
1918..	587,859	298,086	14,918	1,307,120	42,035	3,339
1919..	612,871	304,739	15,538	1,344,865	40,343	3,303

TABLE 105.—Japan—Quantity of DAIRY PRODUCTS made in factories.

[Japanese Yearbook.]

Year.	Condensed milk.	Butter.	Artificial butter.[1]
	Pounds.	*Pounds.*	*Pounds.*
1915	4,863,170	682,282	410,793
1916	8,520,541	897,084	481,869
1917	8,271,925	1,428,258	811,687
1918	14,405,419	1,302,749	750,592
1919	18,852,588	1,203,253	907,704

[1] Principally vegetable.

TABLE 106.—Netherlands—Number of DAIRY COWS and TOTAL CATTLE.

[Jaarcijfers Kroninkrijk der Nederlanden, Rijk in Europe.]

Year.	Dairy cows.	Total cattle (Y.B.)	Year.	Dairy cows.	Total cattle (Y.B.)
1851	.....	1,243,700	1910	1,068,361	2,026,943
1861	.....	1,335,300	1913	1,109,679	2,096,599
1871[1]	911,200	1,435,700	1917[2]	1,234,375	2,301,532
1881[1]	893,900	1,434,400	1918[3]	1,130,908	2,048,872
1891	897,400	1,532,200	1919[4]	1,232,264	1,968,609
1900	965,800	1,655,600	1920	.....	.....

[1] The number of dairy cows shown for 1871 and 1881 are the averages for the 10-year periods beginning on those dates.
[2] Number in April. [3] Number in August. [4] Number in March.

TABLE 107.—Netherlands—PRODUCTION and CONSUMPTION of FACTORY BUTTER.

[Commerce Reports, No. 245, Oct. 18, 1920.]

Month.	1916.		1917.	
	Production.	Consumption.	Production.	Consumption.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
January	7,054,720	3,968,280	5,731,960	4,629,660
February	7,054,720	4,188,740	5,731,960	5,070,580
March	11,684,380	4,409,200	9,700,240	4,409,200
April	11,243,460	3,747,820	9,259,320	3,747,820
May	14,109,440	4,409,200	11,243,460	4,188,740
June	17,195,880	6,613,800	15,432,200	7,054,720
July	12,566,220	6,393,340	11,023,000	6,393,340
August	14,770,820	8,157,020	13,227,600	10,141,160
September	10,582,080	6,613,800	9,920,700	6,834,260
October	9,038,860	6,172,880	8,597,940	6,393,340
November	9,479,780	5,952,420	7,716,100	3,086,440
December	6,393,340	4,409,200	5,070,580	1,984,140
Total	131,173,700	65,035,700	112,655,060	63,933,400

TABLE 107.—Netherlands—PRODUCTION and CONSUMPTION of FACTORY BUTTER—Continued.

Month.	1918.		1919.	
	Production.	Consumption.	Production.	Consumption.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
January	3,968,280	2,425,060	3,747,820	3,086,440
February	3,086,440	2,425,060	3,086,440	3,527,360
March	4,629,660	3,527,360	4,629,660	4,409,200
April	5,511,500	4,629,660	5,731,960	3,306,900
May	9,479,780	5,511,500	8,818,400	5,291,040
June	13,007,140	8,597,940	14,109,440	7,716,100
July	9,259,320	5,731,960	10,582,080	7,936,560
August	11,243,460	6,172,880	12,786,680	8,377,480
September	8,377,480	4,850,120	9,038,860	6,393,340
October	7,054,720	5,070,580	8,377,480	6,613,800
November	7,275,180	5,291,040	8,818,400	5,291,040
December	5,070,580	3,968,280	6,172,880	2,865,980
Total	87,963,540	58,201,440	95,900,100	64,815,240

Month.	1920.	
	Production.	Consumption.
	Pounds.	*Pounds.*
January	5,070,580	3,306,900
February	3,968,280	4,188,740
March	5,952,420	5,731,960
April	7,495,640	5,191,040
May	10,361,620	5,511,500
June	13,668,520	9,920,700
July	10,141,160	7,716,100
August	12,566,220	7,716,100
Total	.....	.....

Extract from consular report: "Despite constantly increasing production, consumption thus far during the current year (1920) has amounted to 71 per cent of the output; in the full year 1919, it was 67.6 per cent; in 1918, 66.1 per cent; in 1917, 56.8 per cent; and in 1916, only 49.6 per cent. Production in 1920 has been at the rate of 103,836,660 pounds, and consumption at the rate of 74,294,560 pounds for the entire year."

TABLE 108.—Netherlands—IMPORTS and EXPORTS of BUTTER and CHEESE.

[Statistick van den in-uit-en doorvoer; (YB.).]

Year.	Butter.		Cheese.	
	Imports.	Exports.	Imports.	Exports.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1850	231, 890	26, 491, 049	287, 023	49, 184, 300
1860	1, 572, 043	39, 331, 100	611, 563	61, 021, 134
1870	6, 861, 284	[1] 47, 865, 455	512, 230	64, 445, 875
1880	2, 759, 718	[1] 79, 479, 604	635, 187	61, 857, 233
1890	8, 834, 868	87, 203, 279	655, 001	66, 832, 431
1900	1, 634, 102	49, 762, 641	578, 990	101, 208, 865
1910	4, 491, 879	72, 456, 276	676, 724	122, 771, 456
1911	6, 038, 399	66, 512, 782	649, 709	113, 607, 416
1912	4, 636, 273	86, 307, 885	652, 996	131, 107, 075
1913	5, 529, 137	81, 702, 476	663, 397	145, 336, 751
1914	3, 880, 444	84, 406, 790	2, 027, 819	149, 573, 576
1915	904, 693	93, 351, 626	339, 559	190, 333, 870
1916	992, 070	78, 997, 431	.....	199, 108, 449
1917	52, 339	54, 214, 930	10, 163	123, 633, 961
1918	42, 782	5, 415, 259	730	32, 893, 251
1919	614, 753	30, 242, 048	42, 370	27, 371, 522
1920	130, 675	45, 575, 696	488, 705	99, 737, 645

[1] Oleomargarin and butter reported together from 1870 to 1889.

TABLE 109.—New Zealand—Number of DAIRY COWS and TOTAL CATTLE.

[New Zealand Yearbook and Statistical Abstract; (YB.).]

Year.	Dairy cows.	Total cattle.	Year.	Dairy cows.	Total cattle.
1861	.....	193, 285	1905	517, 720	1, 810, 936
1864	.....	249, 760	1910	633, 733	2, 020, 171
1871	.....	436, 592	1911	536, 629	.....
1874	.....	494, 917	1916 [1]	732, 931	2, 417, 191
1881	.....	698, 637	1917 [1]	777, 439	2, 575, 230
1885	.....	853, 358	1918	793, 215	2, 869, 465
1890	.....	831, 831	1919	820, 451	3, 035, 478
1895	.....	1, 047, 901	1920	882, 854	3, 059, 445
1900	372, 416	1, 256, 680	1921	993, 472	3, 112, 742

[1] Number on June 20.

TABLE 110.—New Zealand—EXPORTS of DAIRY PRODUCTS.

[Trade and Navigation Reports, Abstract of Statistics of New Zealand, and 1915 Yearbook of New Zealand; (YB.).]

Year ended June 30—	Butter.	Cheese.	Condensed milk.	Casein.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1866	25,984	1,456	None.	None.
1870	384,720	306,320	.....	.....
1880	304,304	80,304	.....	.....
1890	3,899,392	4,530,512	.....	.....
1900	19,329,296	11,519,088	.....	.....
1910	39,931,920	50,614,480	.....	.....
1911	33,867,344	49,187,488	.....	.....
1912	42,349,104	64,631,840	.....	.....
1913	41,692,896	68,506,256	.....	.....
1914	48,615,504	96,742,912	.....	.....
1915	47,056,128	91,532,896	1,175,106	197,680
1916	40,166,784	106,334,592	984,038	451,248
1917	28,492,464	99,203,216	4,105,849	5,179
1918	48,274,576	98,944,160	7,061,830	138,320
1919	38,731,602	176,098,832	2,146,438	.....
1920[1]	30,334,080	161,381,360	.....	.....
1921[1]	71,531,040	160,911,484	.....	.....

[1] Year ended July 31.

TABLE 111.—Norway—Number of COWS, TOTAL CATTLE, and REINDEER.

[Norges Jordbrug, and Statistisk Aarbok; (YB.).]

Year.	Cows.	Total cattle.	Reindeer.
1845	.....	842,568	90,273
1855	.....	949,935	116,891
1865	.....	953,036	101,768
1875	741,598	1,016,617	96,567
1890	706,925	1,006,499	170,134
1900	689,563	950,201	109,000
1907[1]	727,898	1,039,000	142,623
1910	755,483	1,134,613	[2]
1914	.....	1,146,000	[2]
1915	.....	1,121,000	[2]
1916	782,000	1,126,000	[2]
1918	.....	1,085,707	[2]
1919	.....	1,053,743	.....

[1] Beginning with 1907 figures are for Sept. 30; prior to that, December.
[2] Not officially reported after 1907.

TABLE 112.—Roumania—Number of DAIRY COWS and TOTAL CATTLE.

[Estatistical Agricola a Romaniei; (YB.).]

Year.	Dairy cows.	Total cattle.	Year.	Dairy cows.	Total cattle.
1884		2,376,056	1911		[1] 2,666,945
1888		2,406,071	1916		[1] 2,938,000
1890	820,510	2,520,380	1917		1,050,000
1896		2,138,315	1918		
1900	701,227	[1] 2,588,526	1919		1,125,000
1907		[1] 2,585,205	1920		

[1] Including buffaloes. In 1900 there were 25,750 cow buffaloes, 10,482 young buffaloes, and 7,243 other buffaloes in Roumania.

TABLE 113.—Russia—TOTAL CATTLE in European Russia (including Poland).

[Report 109, U. S. Dept. of Agric., and Statistical Abstract of Great Britain; (YB.].

Year.	Total cattle.	Year.	Total cattle.
1860	21,408,800	1911 [1]	36,237,688
1877	27,322,219	1912	34,571,750
1881	27,177,000	1913 [1]	37,165,255
1890	28,541,400	1914 [2]	32,704,000
1900	34,483,900	1915 [2]	32,886,000
1910 [1]	36,301,602	1916 [2]	38,373,000

[1] Includes northern Caucasia.
[2] U. S. Dept. of Agric., Bulletin 987.

There are no available figures on the number of cows or dairy cows in Russia.
Siberia in 1914 had 17,334,000 cattle.
The number of reindeer in Russia in 1913 was 605,000.

TABLE 114.—Russia (including Siberia)—Production of DAIRY PRODUCTS.

[Reports of railroads; Enquête sur l'Industrie, Paris.]

Year.	Butter.	Milk and cream.	Other dairy products.
	Pounds.	*Pounds.*	*Pounds.*
1901–1904 [1]	190,810,300	122,421,580	60,128,690
1905–1908 [1]	226,844,230	154,920,065	71,923,580
1909–1911 [1]	275,286,240	238,639,120	97,713,630
1912	306,414,650	442,939,600	113,728,710
1913	326,253,150	525,972,740	124,549,710
1917 [2]	162,507,600		

[1] Yearly average.
[2] From Russian Chamber of Commerce at Paris (Int. Rev. of the Sci. and Prac. of Agric., Rome, July, August, September, 1919, p. 1000).

TABLE 115.—Russia (including Siberia)—EXPORTS of BUTTER and CHEESE.

[Russian Commerce Reports; (YB.).]

Year.	Butter exports.	Cheese exports.[1]	Year.	Butter exports.	Cheese exports.[1]
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1860–1870 [2]	6,842,479	216,420	1913.....	172,003,064	3,506,408
1871–1875 [2]	5,875,803	36,070	1914.....	118,996,623	1,520,782
1876–1880 [2]	6,694,592	1,089,314	1915.....	119,358,799	994,655
1885–1888 [2]	11,650,610	1,861,212	1916.....	[3] 21,668	[3] 104,727
1894–1898 [2]	14,896,910	1,410,337	1917.....	21,668	[4] 5,417
1900.....	42,923,300	1,490,047	1918.....	.....	.....
1910.....	124,365,658	1,423,675	1919.....	.....	.....
1911.....	168,704,448	2,102,162	1920.....	.....	.....
1912.....	160,770,972	2,088,764			

[1] Not including "curd."
[2] Average annual export.
[3] Preliminary figures.
[4] European frontier only. Figures from U. S. War Trade Board.

TABLE 116.—South Africa (British)—Production of BUTTER and CHEESE.

[Reports of Secretary of Agriculture, South Africa.]

Year.	Butter.	Cheese.	Year.	Butter.	Cheese.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1913....	10,741,000	520,849	1917....	16,013,557	.....
1914....	10,682,000	605,686	1918....	[1] 17,935,680	[1] 8,522,685
1915.....	.....	.....	1919....	[1] 21,748,160	.....
1916....	13,500,000	1,098,184			

[1] Preliminary figures.

TABLE 117.—Spain—Number of CATTLE and GOATS.

[Various sources.]

Year.	Total cattle(YB).	Total goats.	Year.	Total cattle(YB).	Total goats.
1865.....	2,904,598	.....	1914.....	2,743,000	3,265,000
1891.....	2,217,659	2,534,000	1915.....	2,926,170	3,216,682
1905.....	2,075,142	.....	1916.....	3,070,903	3,207,360
1906.....	2,497,000	2,440,000	1917.....	3,233,000	4,182,000
1910.....	2,368,767	3,216,489	1918.....	3,712,000	4,476,000
1911.....	2,541,112	3,369,624	1919.....	3,173,577	3,685,808
1912.....	2,561,894	3,116,226	1920[1]....	3,396,573	3,790,656
1913.....	2,879,000	3,394,000			

[1] Milk cows, 228,659.

TABLE 118.—Sweden—Number of COWS and TOTAL CATTLE.

[Statistik Arsbok and Statistik Tidskrift.]

Year.	Cows.	Total cattle(YB).	Year.	Cows.	Total cattle(YB).
1865	1,185,556	1,924,354	1913	1,841,991	2,720,741
1870	1,231,477	1,965,900	1914	1,845,989	2,761,000
1880	1,409,236	2,227,757	1915	1,841,508	2,883,884
1890	1,578,927	2,399,491	1916[1]	1,769,689	2,913,159
1900	1,764,819	2,582,555	1917[1]	1,775,353	3,020,381
1910	1,861,219	2,747,526	1918[1]	1,634,982	2,584,159
1911	1,837,035	2,689,609	1919[1]	1,607,060	2,550,828

[1] June 1.

The number of reindeer in Sweden in 1918 was 275,084.

TABLE 119.—Sweden—DAIRY PRODUCTS in factories.

[Statistik Arsbok.]

Year.	Milk delivered to dairies.[1]	Number of butter factories.	Butter made.	Cheese made.
	Pounds.		*Pounds.*	*Pounds.*
1890	1,115,774,074	1,562	35,479,510	14,538,412
1895	1,634,582,991	1,793	54,953,356	15,243,652
1900	1,856,891,758	1,688	57,570,964	16,392,215
1905	2,023,987,671	1,575	62,727,497	19,043,775
1910	2,533,570,352	1,416	72,616,094	22,345,956
1913	2,879,401,605	1,650	70,339,968	32,138,659
1914	2,766,911,890	1,627	72,615,115	28,869,237
1915	2,376,434,915	1,663	60,597,840	24,127,142
1916	2,509,339,653	1,698	62,264,518	28,505,478
1917	2,085,194,455	1,762	45,551,450	22,630,219
1918	1,289,521,246	1,495	23,454,739	11,798,815
1919	1,560,534,928	1,450	27,409,792	17,603,731

The term "dairies" is used throughout Europe for factories which receive milk and cream for any purpose; but generally it refers to butter and cheese factories.

TABLE 120.—Sweden—IMPORTS and EXPORTS of BUTTER and CHEESE.

[Swedish Commerce Reports, Bidrag till Sveriges Officiala; (YB.).]

Year.	Butter.		Cheese.	
	Imports.	Exports.	Imports.	Exports.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1861–1865 [1]	2,352,000	369,600	.....	.....
1871–1875 [1]	3,348,000	6,955,000	.....	.....
1881–1885 [1]	5,992,000	17,684,000	.....	.....
1890	3,920,000	33,163,200	430,080	316,960
1900	1,096,678	42,246,271	710,593	9,160
1910	205,352	47,949,356	707,677	51,588
1911	343,029	48,888,521	742,950	6,393
1912	273,000	46,818,477	1,258,827	11,971
1913	432,071	43,329,909	1,213,758	6,045
1914	188,879	41,941,296	764,864	69,196
1915	29,848	41,532,093	1,148,233	627,978
1916	61,059	28,703,513	285,855	992
1917	15,756,261	3,117	1,208,363	699
1918	11,425,615	3,302	423,715	172
1919	13,846,436	76,233	3,575,885	12,284
1920 [2]	16,940,874	53,417	5,511,985	.....

[1] Average.
[2] Preliminary figures.

TABLE 121.—Switzerland—Number of DAIRY COWS, TOTAL CATTLE, and GOATS.

[Statistisches Jahrbuch der Schweiz; also Recensement Fédéral du Bétail; (YB.).]

Year.	Dairy cows.	Total cattle.	Goats.
1866	553,205	993,291	375,482
1876	592,413	1,035,856	396,091
1886	663,102	1,212,538	416,323
1896	688,052	1,306,696	415,817
1901	739,922	1,340,375	354,634
1908	785,950	1,498,144	362,117
1911	796,909	1,443,483	341,296
1912	.....	.....	.....
1913	.....	.....	.....
1914	.....	.....	.....
1915	.....	.....	.....
1916	848,011	1,615,893	358,093
1917	.....	.....	.....
1918	785,547	1,520,165	356,455
1919	738,896	1,005,000	349,794
1920 [1]	729,999	1,382,116	333,852

[1] On April 21.

TABLE 122.—Switzerland—PRODUCTION of MILK as estimated officially.

[Swiss Yearbook.]

Year.	Cows' milk.	Goats' milk.	Total milk.
	Pounds.	*Pounds.*	*Pounds.*
1911	5,224,902,000	209,437,000	5,445,362,000
1912	5,533,546,000	209,437,000	5,754,006,000
1913	5,798,098,000	209,437,000	6,018,558,000
1914	5,886,282,000	220,460,000	6,106,742,000
1915	5,533,546,000	220,460,000	5,731,960,000
1916	5,423,316,000	220,460,000	5,643,776,000
1917	4,585,568,000	220,460,000	4,806,028,000
1918	3,968,280,000	220,460,000	4,188,740,000

These estimates were made in terms of million quintals, to the nearest tenth; hence quantities are not exact and can be considered only as generally representative.

TABLE 123.—Switzerland—DAIRY PRODUCTS manufactured.

[Swiss Yearbook.]

Year.	Cheese.	Butter.	Condensed milk.
	Pounds.	*Pounds.*	*Pounds.*
1911	144,401,300	31,525,780	99,207,000
1912	170,195,120	35,494,060	99,207,000
1913	180,556,740	37,257,740	88,144,000
1914	174,824,780	33,478,200	121,253,000
1915	127,425,880	36,596,360	110,230,000
1916	110,891,380	37,037,280	99,207,000
1917	71,429,040	30,864,400	66,138,000
1918	63,051,560	28,880,260	55,115,000

TABLE 124.—Switzerland—Per capita CONSUMPTION of DAIRY PRODUCTS.

[Swiss Yearbook.]

Year.	Cheese.	Butter.	Condensed milk.	Whole milk.
	Pounds.	*Pounds.*	*Pounds.*	*Gallons.*
1911	22.0	11.5	13.2	64.3
1912	28.9	11.2	8.8	64.3
1913	28.2	12.6	.....	67.2
1914	26.4	12.1	22.0	67.4
1915	15.0	11.0	15.4	67.7
1916	17.4	9.9	13.2	71.8
1917	14.8	8.2	11.0	67.5
1918	16.1	7.5	.....	51.3

TABLE 125.—Switzerland—IMPORTS of DAIRY PRODUCTS.

[Swiss Commerce Reports, (YB.).]

Year.	Fresh milk.	Butter.	Cheese.	Condensed milk.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1885	246,033	2,621,931	2,854,957	.....
1890	12,996,117	3,556,681	3,182,561	.....
1900	16,037,865	4,249,146	5,171,991	.....
1910	20,110,802	11,062,683	6,308,683	.....
1911	23,858,181	12,097,742	7,643,789	.....
1912	25,994,659	11,930,925	7,995,202	.....
1913	27,649,211	11,155,906	7,763,058	.....
1914	19,270,850	8,900,411	4,717,403	.....
1915	15,510,463	5,699,773	3,409,854	.....
1916	9,773,653	946,214	427,251	.....
1917	7,655,474	369,491	213,626	.....
1918	7,189,201	54,454	86,640	.....
1919	6,225,570	13,250,307	995,817	11,528,516
1920	14,149,784	18,253,647	4,368,000	.....

TABLE 126.—Switzerland—EXPORTS of DAIRY PRODUCTS.

[Swiss Commerce Reports, (YB.).]

Year.	Fresh milk.	Butter.	Cheese.	Condensed milk.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
1900	8,959,274	217,594	60,265,166	62,387,094
1910	31,063,475	172,400	69,391,549	63,586,876
1911	33,598,986	193,343	66,593,470	85,975,873
1912	35,603,408	203,705	66,435,401	91,978,558
1913	39,942,502	192,682	79,649,552	80,415,269
1914	37,642,884	217,374	77,572,599	100,070,762
1915	41,199,124	148,370	74,774,961	96,300,455
1916	34,942,689	2,646	47,214,815	76,300,455
1917	23,062,325	220	12,861,416	[1] 87,686,642
1918	20,739,113	.....	2,680,353	43,820,394
1919	20,562,084	440	1,369,056	22,045,559
1920	.....	.....	.....	.....

[1] Figures for condensed milk for 1917 taken from Swiss Yearbook.

TABLE 127.—**United Kingdom of Great Britain and Ireland—Number of COWS and TOTAL CATTLE in the United Kingdom, including the Channel Islands and the Isle of Man.**

[British Statistical Abstract, and Board of Agriculture and Fisheries of England; (YB.).]

Year (June).	Cows.	Total cattle.	Year (June).	Cows.	Total cattle.
1875.....	3,783,607	10,128,112	1914.....	4,595,128	12,184,505
1880.....	3,639,755	9,833,563	1915.....	4,494,740	12,171,452
1890.....	3,956,321	10,789,421	1916.....	4,499,321	12,451,540
1900.....	4,096,682	11,455,009	1917.....	4,514,803	12,382,236
1910.....	4,342,186	11,765,453	1918.....	4,603,841	12,311,149
1911.....	4,407,800	11,866,111	1919.....	4,587,805	12,491,427
1912.....	4,400,816	11,914,635	1920.....	4,381,794	11,770,274
1913.....	4,317,957	11,936,600			

TABLE 128.—**United Kingdom—Number and kinds of CATTLE on the Islands of Jersey and Guernsey, June, 1920.**

[Agricultural Statistics, 1920, Vol. LV, Part I.]

Classification.	Jersey.	Guernsey.
Cows in milk	4,966	2,837
Cows in calf, not milk	317	201
Heifers in calf	1,000	327
Total cows	6,283	3,365
Bulls being used	126	89
Other cattle, 2 years old and above	190	422
Other cattle, 1 year and under 2 years	1,674	1,045
Other cattle, under 1 year	2,250	1,333
Total	10,523	6,254

TABLE 129.—**United Kingdom—MILK PRODUCTION in Great Britain (England, Scotland, and Wales).**

[Minister of Agriculture and Fisheries, Part III, 1919.]

Year.	Annual yield per cow.	Annual production, less milk for calves.	Year.	Annual yield per cow.	Annual production, less milk for calves.
	Imperial gallons.	*Million gallons.*		*Imperial gallons.*	*Million gallons.*
1909–1913....	560	1,231	1917.....	495	1,086
1914.....	575	1,253	1918.....	436	955
1915.....	550	1,241	1919.....	470	1,085
1916.....	525	1,164			

One imperial gallon (British) equals 1.2 U. S. gallons, or 10.32 pounds.

TABLE 130.—United Kingdom—CONSUMPTION of DAIRY PRODUCTS in 1919.

[Estimates, Minister for Food in National Food Journal, London, Mar. 10, 1920.]

Product.	Total consumption.	Home production.	Importation.
	Pounds.	*Pounds.*	*Pounds.*
Butter	403,200,000	233,856,000	169,344,000
Cheese	324,800,000	97,440,000	227,360,000

TABLE 131.—United Kingdom—Average ANNUAL CONSUMPTION of DAIRY PRODUCTS and MARGARIN from 1909 to 1913.

[Estimates in British Food Journal, July–October, 1919.]

Product.	Total consumption.	Home production.	Importation.
	Pounds.	*Pounds.*	*Pounds.*
Butter	748,160,000	282,056,320	466,103,680
Cheese	353,920,000	89,541,760	264,388,240
Margarin	264,320,000	134,274,560	130,045,440
Margarin (1918)	568,960,000	535,391,360	33,568,640

TABLE 132.—United Kingdom—Average ANNUAL CONSUMPTION of DAIRY PRODUCTS and MARGARIN from 1909 to 1913.

[The Feeding of Nations, by E. H. Starling.]

Product.	Home production and importation.	Per capita consumption.
	Pounds.	*Pounds.*
Milk and cream	9,920,700,000	216
Butter	707,676,600	[1] 15.38
Cheese	324,076,200	[1] 7.04
Condensed and evaporated milk	121,693,920	2.64
Margarin	261,465,560	5.46

[1] The per capita consumption of butter and of cheese as shown in this table is much less than that shown in Tables 4 and 5. This table is based on the average for 5 years, 1909 to 1913, while the figures in Tables 4 and 5 are based on a single year. There was a decrease in imports and in production during this period, hence a decrease in consumption.

Dairy products were estimated from 1908 census, and per capita consumption was obtained by using 46 million as average population for the period.

TABLE 133.—United Kingdom—IMPORTS and EXPORTS of BUTTER.

[Trade and Navigation Reports; (YB.).]

Year.	General imports.	Domestic exports.	Year.	General imports.	Domestic exports.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1850.....	35,823,648	6,791,568	1913.....	463,571,136	1,220,240
1860.....	94,092,544	14,039,424	1914.....	446,230,848	1,222,256
1870.....	129,831,520	6,443,136	1915.....	431,631,760	1,178,352
1880.....	[1] 260,546,160	3,517,696	1916.....	243,646,480	979,664
1890.....	227,104,304	2,745,120	1917.....	202,329,792	264,208
1900.....	378,363,792	1,177,120	1918.....	176,691,536	197,232
1910.....	484,460,368	1,035,328	1919.....	[2] 174,742,848	252,752
1911.....	481,901,504	1,335,936	1920.....	[2] 192,230,528	362,544
1912.....	448,577,808	1,270,304	1921.....	[2] 394,687,776	1,103,200

[1] Including margarin for 1880. [2] Preliminary figures.

TABLE 134.—United Kingdom—IMPORTS and EXPORTS of CHEESE.

[Trade and Navigation Reports; (YB.).]

Year.	General imports.	Domestic exports.	Year.	General imports.	Domestic exports.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1850.....	33,003,168	968,016	1913.....	257,302,080	995,680
1860.....	65,327,696	3,214,400	1914.....	272,592,768	804,832
1870.....	116,623,472	2,821,728	1915.....	305,372,032	824,880
1880.....	198,911,664	1,333,136	1916.....	291,661,888	985,824
1890.....	240,136,288	1,367,632	1917.....	329,959,392	212,240
1900.....	303,058,336	1,046,600	1918.....	263,131,904	70,448
1910.....	275,110,080	911,008	1919.....	[1] 237,968,080	110,208
1911.....	263,012,512	949,088	1920.....	[1] 308,029,120	454,048
1912.....	258,584,144	956,704	1921.....	[1] 314,918,688	479,808

[1] Preliminary figures.

TABLE 135.—United Kingdom—IMPORTS and EXPORTS of CONDENSED AND EVAPORATED MILK.

(Commerce and Trade Reports.)

Year.	Imports.	Exports.	Year.	Imports.	Exports.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
1888.....	26,754,464	.....	1915.....	170,970,016	37,628,192
1890.....	34,370,560	6,886,992	1916.....	183,693,664	35,207,312
1900.....	92,108,912	23,458,064	1917.....	184,255,344	14,271,264
1910.....	106,974,000	49,194,432	1918.....	287,582,288	320,720
1911.....	124,236,560	51,151,520	1919.....	[1]356,607,880	1,437,296
1912.....	132,082,832	52,651,424	1920.....	[1]221,140,640	6,233,936
1913.....	137,095,728	50,676,304	1921.....	[1]245,149,276	14,205,936
1914.....	133,525,728	7,146,960			

[1] Preliminary figures.

Prior to 1888 condensed milk was included in "Other dairy products."

TOPICAL INDEX.

Page.

Explanatory note 2
General statistics 4
Butter—
consumption per capita, in various countries 5
production and exportation, by countries 7
standards of fat and moisture 8
Butterfat receipts in creameries by months 9
Calf, quantity of milk to raise a 9
Cheese, consumption per capita, by countries 6
Cow-testing associations, growth in various countries 6
Food, normal, for United Kingdom 9
Milk—
and cream, weight per gallon, with varying fat content 8
consumption per capita, by countries 5
solids in various dairy products 7
to raise a calf 9
yield per cow, by countries 5
Population of various countries 4
United States 10
Accredited herds 18
Balance of trade with foreign countries, in dairy products 40, 41
Bull associations 16
Butter—
creamery, in storage, by months 28
exports and imports 29, 40, 41
factories, number of 25
factory and farm production, by years 25
from whey, production, by months 21, 25
production in factories, by months 21
production in factories, by States 23, 24
production on farms, by States 27
quotations, New York 30, 31
quotations, San Francisco 29
receipts, New York, Chicago, San Francisco 28
renovated, New York quotations 36
renovated, production and export 22
Butterfat—
delivered to creameries 9
from advanced-register cows 14
Buttermilk—
condensed or evaporated 37
dried or powdered 26, 38
Casein—
production from skim milk and buttermilk 26
production, importation, and prices 37
Cattle—
exported 10
imported 11, 14
number, by breeds 10, 12
number of dairy cows, on farms 11, 12, 27
number of other cattle on farms, by years 11

United States—Continued.
Cattle—Continued.
purebred— Page
butterfat production, advanced register 14
imported 11
number on farms, by States 12
registered, by years—
Ayrshires 14
Guernseys 15
Jerseys 15
Holsteins 15
tuberculin-tested, by breeds 18
Cheese—
American Cheddar 21, 31, 35
New York quotations 34
production, from whole milk and skim milk 21, 31
brick and Münster, production 21, 31
cottage, pot, and baker's, production 21, 23, 24, 32
cream and Neufchâtel, production 21, 31
domestic Swiss—
Chicago quotations 34
production, by months and years 21, 31
production, by States 32
filled, production and export 35
imports and exports 33, 40, 41
imports from France, Greece, Italy, and Switzerland 33
in storage, by months 35
Italian varieties, production in United States 21, 31
Limburger, production 21, 31
production—
by kinds 21, 31
farm and factory 32
in factories 23, 24
on farms 27, 32
Condensed milk, evaporated and dried milk, etc.—
buttermilk, powdered or condensed, production 23, 24, 26, 37, 38
condensed milk, skimmed and unskimmed, sweetened and unsweetened, production 22
condensed and evaporated milk, imports and exports 36, 40, 41
condensed and evaporated milk, production 22, 23, 24, 36, 37
evaporated milk with foreign fats, production 22, 23, 24
factories in operation 37
malted milk, production 26, 38
powdered milk, whole or skimmed, production 26, 38
powdered cream, production 26
sterilized milk, canned, production 22, 23, 24, 36
Cost of production of milk 20
Cow-testing associations—
growth before and after war 6
number in United States 16
yearly records in 16
Creameries—
butterfat delivered to, in each month 9
number in United States 25

United States—Continued.
Dairy products made— Page.
in factories, by months 21, 22
in factories, by States 23, 24
on farms, by States 27
Ice-cream production, by months and years 39
Milk—
distribution by uses 17
production—
cost of 20
on farms 27
per cow 5, 27
total 17, 27
received in Philadelphia, New York, and Boston 19
retail price, New York 19
wholesale price, Chicago 18
(See also Condensed milk, etc.)
Milk sugar—
production, by months 26
production and importation, by years 38
Oleomargarin, production and exportation 34
Silos, number and capacity 17
Tuberculin-tested cattle, by breeds 18
Whey butter, production 21, 25
Foreign countries:
Argentina—
butter and cheese, imports and exports 44
butter and cheese, production and consumption 44
cattle, number and character 43
Australia—
cattle 46
dairy products 45
exports 46
Austria, cattle 46
British South Africa, butter and cheese production 61
Canada—
butter and cheese, imports and exports 48
butter and cheese production 47
cattle 47
condensed and powdered-milk production 49
exports of dairy products 48
Denmark—
butter imports and exports 49
butter quotations 50
cattle 49
Finland, cattle 50
France—
cattle 51
cheese exported to United States 33
imports and exports 51, 52
Germany—
cattle 52
consumption of butter and cheese 52
imports and exports 53
production of milk, butter, and cheese 53

Foreign countries—Continued. Page.
Greece, cheese exported to United States 33
Hungary, cattle 54
India, cattle 54
Italy—
cattle, buffaloes, sheep, and goats 54
cheese exported to United States 33
imports and exports 55
Japan—
cattle 55
manufacture of dairy products 56
Netherlands—
butter and cheese, imports and exports 58
butter production and consumption 56, 57
cattle 56
New Zealand—
cattle 58
exports 59
Norway, cattle and reindeer 59
Pan American countries—
butter imports and exports 42
cheese imports and exports 42
condensed-milk imports 43
Poland—See Russia.
Roumania, cattle 60
Russia—
cattle 60
dairy production 60
exports of butter and cheese 61
Siberia 60, 61
Scuth Africa (British), butter and cheese production 61
Spain, cattle and goats 61
Sweden—
cattle and reindeer 62
dairy production 62
imports and exports 63
Switzerland—
cattle and goats 63
cheese exported to United States 33
consumption of dairy products 64
dairy production 64
imports and exports 65
United Kingdom—
butter imports and exports 68
cattle and cows in kingdom 66
Channel-Island cattle 66
cheese imports and exports 68
condensed and evaporated milk, imports and exports 68
consumption of dairy products and margarin 67
milk production 66

LIBRARY OF CONGRESS
0 002 854 949 0